

CAREER DEVELOPMENT PROCESSES OF UNDERGRADUATE
AND GRADUATE COLLEGE WOMEN

By

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A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF
THE UNIVERSITY OF FLORIDA IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1978

ACKNOWLEDGMENTS

I would like to express my appreciation to the persons who helped with this study:

To my committee for the valuable advice, critiques, and encouragement;

To the college women who participated in this study, for the time and effort they put into completing the questionnaire;

To my family for providing love and support throughout all my academic endeavors;

To my friends for being supportive and encouraging during the dissertation process;

To the typist for her patience.

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Abstract of Dissertation Presented to the Graduate
Council of the University of Florida in Partial
Fulfillment of the Requirements for the
Degree of Doctor of Philosophy

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By

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1978

Chairman: Elias L. Tolbert

Major Department: Counselor Education

The main purpose of this study was to improve the understanding of the process of college women's career development. In order to discover the various parameters that affect this process, a vocational questionnaire was sent to 250 currently enrolled undergraduate women in their senior year of college, and 250 currently enrolled graduate women in Masters, Specialists, Doctoral, Law (J.D.), and Medical (M.D.) programs. In the questionnaire the respondents were asked to discuss their perceptions in nine major areas which included: their perceptions of the attitudes of their parents, peers, and role models concerning women's career options; their own plans to participate in the labor force; their

desire to combine career and marriage; their emphasis on career planning; their perception of obstacles in their life plans; their perceptions of advice given to them about their life plans; their choice of vocational role models; their life plans and conflicts perceived in those plans; and their occupational fantasies. In order to analyze the results of the questionnaire stepwise multiple regression analysis and content analysis were used.

The results revealed several important findings that are useful for counselors. In twenty-four of the regression analyses evidence was found that a significant relationship existed between the attitudes of parents, peers, or role models concerning women's career options and the respondents' attitudes about their career development. In the questions where content analysis was used the findings suggest that women feel that combining career and marriage is important for them, and that these activities may sometimes conflict with one another. It was also found that college women utilize female role models to a greater extent than male role models. College women have a variety of concerns that center around their career development needs. Implications for counselors are presented and discussed.

CHAPTER I

INTRODUCTION

Need for the Study

Holland (1966) made this commentary on the state of the art in vocational theory.

Unfortunately most of our empirical knowledge about personality and vocational behavior has been obtained in studies of men. Consequently, it is difficult to construct a theory of personality that applies equally to men and women. This present theory is no exception: it is based chiefly on studies of men and probably less useful for understanding the behavior of women. A special but closely related theory for women is desirable, but at this point, I have none to offer (Holland cited in Vetter, 1973, p. 13).

In this quote Holland is referring to vocational theory in general as well as to his theory of vocational behavior in particular. Evidence for his opinion can be gleaned by surveying the major theorists in the vocational development literature. Super (1957) has provided significant insights into the dynamics of vocational behavior. The majority of his research has been based on boys and men. In his "Career Pattern Study," a classic in the field, the group studied was ninth-grade boys. In another instance, Super collaborated with Starishevsky, Maitlin, and Jordaan to write a monograph on vocational self-concept theory (1963). The monograph delineates the major findings of twenty years

of research which had been derived from research about men. One can not discount the impact of their research. Rather, one can develop an understanding of the need for research to be done about women's career development. In fact, many of the major vocational theorists including Super (1957) have called for research about women's career development.

Many career development theories hypothesize that a person's identity has an intrinsic vocational component. In Borow (1973) Gardner Murphy expounds on the profound effect that all varieties of work experience have on one's self concept. Several other theorists, including Matthews (1972), have written about the idea of vocation being part of one's personal development over the life span. In this formulation work becomes more than simply something one does from nine to five each day; work becomes part of a total life style that includes leisure, family, and outside work projects. Super (1957) has shown that work experiences are part of a person's ever-continuing self-development over time and has pointed out that the pre-teen and adolescent years are important precursors of the college years in which one makes tentative career choices. In his terminology one is in the process of crystallizing, specifying, and implementing one's vocational self-concept between the ages of eighteen and twenty-five.

Purpose of the Study

The primary purpose of this study was to gain new insights about the career development process of college women.

Based on the lack of research done about women's career development and the importance that the vocational theorists give to this area of new research, the researcher conducted a study in which the parental, peer, and role model attitudes about women's career options would be studied in relation to the college woman's perceptions about her own career options. Table 1 is presented to explain the theoretical framework of this study.

Rationale for the Study

An understanding of the relationship between the attitudes of significant reference groups and the college woman's attitudes about length of time she plans to work, the feasibility of combining career and marriage, the importance of career planning, the presence of conflicting advice about her plans, and the presence of obstacles in her plans is important in order to help counselors work with college women in vocational counseling. Counselors, in the past, have sometimes shown a bias against college women who were planning to spend a majority of their lives involved in a career. Cook and Stone (1973) illustrate this point with several studies that show that male and female counselors alike assume that girls and women need to emphasize their marriage plans rather than their career plans. Counselors have also exhibited bias about women clients who showed an interest in male dominated occupations. Schlossberg and Pietrofessa (1973) found evidence of both these forms of bias in a review of research literature about vocational counseling. They suggest that all counselors need

to examine their own biases and to examine the biases of the culture as a whole. Matthews (1972) sums up this point aptly by saying:

It is important to note that the counseling literature still seems to find career commitment unusual and related to the gifted, talented, creative girl. One wonders about the untapped potential of elementary and junior high girls who are given "job" counseling at an early age in life (p. 26).

A study of the relationship of cultural attitudes about women's career options and the college woman's perception about her options was developed. In this dissertation study two groups of college women were chosen for investigation. The research literature concerning vocational development indicated that the senior year in college was an important time of decision making for college students (Madison, 1969; Cook and Stone, 1973). Another important time for vocational decision making is during the time a college student is enrolled in graduate degree programs (Astin, 1969). In order to fully explore the perceptions of college women the research questions were developed for both groups, the undergraduate and graduate student. Group A was composed of a random sample of college women who were graduating with a B.A. or B.S. degree in the academic year 1977. Group B was composed of a random sample of women students enrolled in Masters degree programs, Specialists degree programs, Doctoral degree programs, Law degree programs, and Medical degree programs in the academic year 1977. The purpose of including a wide range of majors and degree program candidates was to develop a full picture of the perceptions of

all these students. The research questions were developed for study of members of Group A and Group B.

Research Questions

1. What is the relationship between parental, peer, and role model attitudes about women's career options and the length of time that members of Group A and Group B plan to spend in the labor force?
2. What is the relationship between parental, peer, and role model attitudes about women's career options and the perceptions of Group A and Group B concerning the feasibility of combining career and marriage?
3. What is the relationship between parental, peer, and role model attitudes concerning women's career options and the importance given to career planning by Group A and Group B?
4. What is the relationship between the parental, peer, and role model attitudes about women's career options and the perception of advice about future plans given by others of Group A and Group B?
5. What is the relationship between the parental, peer, and role model attitudes concerning women's career options and the perception of obstacles in future plans of Group A and Group B?

6. Is there a difference in the types of vocational role models chosen by Group A and Group B?
7. Is there a difference in the types of life plans made by Group A and Group B?
8. Is there a difference in the conflicts foreseen in future plans of Group A and Group B?
9. Is there a difference in the occupational fantasies of Group A and Group B at ages eight, thirteen, and twenty?

Definition of Terms

1. *Vocational Self-Concept*--"The term vocational self-concept as used here denoted the constellation of self-attributes which the individual considers vocationally relevant; these may or may not have been translated into a vocational preference" (Super, Starishevsky, Maitlin, and Jordaan, 1963, p. 19).
2. *Vocational Preference*--"In expressing a vocational preference (Super, 1957) a person puts into occupational terminology his idea of the kind of person he is; that in entering an occupation, he seeks to implement a concept of himself; that in getting established in an occupation he achieves self actualization" (Super, Starishevsky, Maitlin, and Jordaan, 1963, p. 1).

3. *Exploratory Stage*--"The vocational developmental tasks of the exploratory stages are as follows: crystallizing a vocational preference, specifying a vocational preference, and implementing a vocational choice" (Super, Starishevsky, Maitlin, and Jordaan, 1963, p. 50).
4. *Vocational Aspirations*--This concept subsumes the range of fantasies, tentative choices, and plans that a person makes in terms of her vocational development.

Organization of the Research Report

1. Chapter I--Introduction

This chapter introduces the reader to the research topic.

2. Chapter II--Review of the Literature

The relevant literature pertaining to women's career development are analyzed in terms of the research questions.

3. Chapter III--Methodology

The research questions were further discussed and a full explication of the methodology for this study are presented.

4. Chapter IV--Results

A presentation of the research results is made in terms of the research hypotheses.

5. Chapter V--Conclusion

The researcher discusses the results with implications and conclusions for the counseling profession in terms of vocational theory and vocational counseling for women.

CHAPTER II

REVIEW OF LITERATURE

This chapter includes a discussion of relevant studies in these four areas:

- a) parental effects on college women's career aspirations,
- b) peer effects on college women's career aspirations,
- c) role model effects on college women's career aspirations,
- d) career aspirations and plans of college women.

A. Parental Influences

In her study on the family dynamics of women executives, Hennig (1974) discovered several crucial variables in the career development of this group. She found the following:

Both parents offered the daughter large amounts of evidenced personal satisfaction and pleasure for her accomplishments. . . . Both parents valued highly for their girl child both femaleness and achievement activity and competitive success. . . . The family constellation provided a security base and a source of personal reward satisfaction and reinforcement that allowed the young girl to overlook or retreat from potential gender related role conflicts (p. 91).

It is evident from Hennig's work that parents play an important role in the developing vocational identity of their

female children. Five vocational theorists concur with this insight. Super, Starishevsky, Maitlin and Jordaan (1963) cite several sources of influence for the person's developing self-concept. One of these is psychological support and encouragement. In their description of this concept they point out that without this crucial support from parents, the individual is not likely to risk trying out very many vocational roles. Roe (1968) hypothesizes that the family environment will affect vocational preference. Roe divides the family environment into categories of: "emotional concentration on the child, avoidance of the child, acceptance of the child" (p. 213). The third environment included in this case is: "non-coercive, unrestrictive, and encourages independence" (p. 213).

Ginzberg and Yohalem (1966) found several interesting results that bear on the topic of family influence on women's career aspirations. In their study a group of Columbia University graduates cited parental encouragement as a crucial factor in their career development. One of the women sums up a common sentiment:

As I look back upon all this, I can comment on several factors which seem to have been necessary in achieving the educational and professional levels that I did attain. . . . The third is a reasonable amount of good luck, and the fourth, strong support from one or more important figures in the family or close environment. This can take many forms--pride in your achievements, guidance, moral support, or financial assistance (p. 34).

Many of the women in Ginzberg's sample give voice to similar feelings. A contrast to this viewpoint, cited several times

in this study, is that the level of negative feedback given to some of these women as they grew up spurred them on. Ginzberg's opinion is that one must look at the influence of family perceptions, both positive and negative, in order to understand the career orientations of group members. He states that many young boys "receive too little occupational guidance to enable them to make the most of their potentialities and education. Girls receive even less" (p. 91).

Several theorists concur with Ginzberg in his perception of the lack of parental encouragement for their daughters' career plans. Schlossberg (1972) describes the reasons that women may limit their vocational aspirations, citing sex-role stereotyping of the job market as one reason for limited aspirations of women. She points out that parents have a tremendous effect on the child's perception of the occupational world and quotes Gornick in this regard:

The contradictory message that the girl gets from society, as well as from parents, is that if she is too smart, too independent, and above all, too serious about her work, she is unfeminine and will therefore never get married (p. 139).

Schlossberg feels that the parental messages to their daughters in terms of potential loss of femininity may limit the vocational fantasies that girls and women have. If girls and women fantasize about themselves as "cooks, cleaners, and nurses" (p. 138), then there is a high probability that this is what they will choose to do in life.

In order to fully understand the effects of family upon career aspirations, one must look at research on mothers

and fathers as role models for their daughters. Angrist and Almquist (1975) have done an extensive study in this area, especially concerning the effects of mothers as role models.

They found the following:

The special influence that family exerts seems to come mainly via the mother as a role model for her daughter. We could find no unique influence by the father. Rather, the same-sex parent seems to be most influential for girls (p. 155).

In the career-oriented group the mothers of 56% of the respondents had worked during the student's college years.

In contrast, in the non-career-oriented group only 26% of the mothers had worked in the student's college years. The researchers concluded that: "Most daughters accept the definition of the feminine role portrayed by their mothers" (p. 157).

Baruch (1973, 1974) found evidence to support the idea that mothers serve as role models for daughters in relation to career aspirations and self-esteem. In her 1973 study she discovered that college women with "mothers who have not worked devalue feminine competence" (cited in Angrist and Almquist, 1975, p. 157). In her 1974 study she expanded her findings. She found that "daughters of mothers who preferred a career were higher in self-esteem, . . . and in self-ratings of competence" (p. 176). Her theory, which was born out by her research, is that the level of self-esteem and feeling of competence would be higher for daughters of mothers who endorsed careers for women than for daughters of women who did not. According to Baruch, what is significant is that the

vocational history of the mother is not as crucial as her attitudes toward careers for women.

Several other findings are important to consider in this vein. The Group for the Advancement of Psychiatry (GAP) did an extensive analysis of the perceptions of women concerning the college milieu. In their book, The Educated Woman: Problems and Perspectives (1975), they conclude that a woman needs to "identify with a competent older woman or family member who treats her aspirations seriously" (p. 121). They also point out that:

In more general terms, a young girl's formation of her own identity is strongly influenced by family values, the attitudes of society, and personal experiences, all of which interact with the girl's own physical and psychological attributes (p. 45).

In contrast to the point of view that mothers can be positive role models is the finding that some women use their mothers as negative role models. Several researchers have found that young women cite memories of frustration that some of their mothers felt as housewives. Horner (1972) studied achievement-related conflicts in women and cites research done by Schwenn (1970) in support of the effect of negative role modelling of mothers. Some of the women in Schwenn's study stated that there was discouragement from their mothers on the issue of combining career and marriage. Yet, the career-oriented daughters persisted in their aspirations because they did not want to find themselves in jobs with little chance for advancement.

The question of fathers as role models for their daughters opens up another avenue of inquiry. Astin and Myint (1971) found that there is some relation between fathers' encouragement and the daughters' career aspirations. Utilizing data from the Project Talent Data Bank, the researchers analyzed the factors that predict differing forms of career commitment in the post-high school years. Using discriminant analysis, they found that: "A high SES and the father's encouraging the girl to go to college continued to be important predictors of her career orientation five years after high school" (p.374). Astin (1969), in her study of female doctorate recipients in the United States, found that many of these women had fathers who had served as positive role models for career commitment in the fields such as medicine, chemistry, and art. Lozoff, in her article: "Fathers and Autonomy in Women" (1974), adds another dimension to this concept. She concludes:

Reviewing the past suggests that "fathers are not enough," that the influence of fathers in the high autonomy subgroups was neutralized by the absence of female careerists with whom young children could identify (p. 109).

B. Peer Influences

In order to understand the female college student's aspirations, one must investigate the social nexus in which she lives. Many vocational theorists have commented on the importance of peer group interactions in the formation of a vocational identity. Super, Starishevsky, Maitlin and

Jordaan (1963) observe: "While too great reliance on the standards, values, and expectations of the peer group can limit or channel adolescent's exploratory behavior, identification with the peer group can have beneficial results" (p. 75). Jordaan points out that responding to peer values can have a detrimental, as well as beneficial results. For college women, the peer nexus is a conflicted environment. For the generation of college women of the fifties and early sixties, peer support favored marriage plans as primary and career plans as secondary (Cook and Stone, 1973).

Madison (1969) has observed that:

The girl's primary identity in college tends to be defined in terms of having a boy and marriage afterward. Because of this identity situation, the girl's college experience is dominated by an emotional preoccupation with boys and marriage that profoundly influences her educational and personal development (p. 152).

Madison, using a case study approach in order to understand the developmental stages that college women go through, found that a primary concern of many of the women followed up in later years, was that they had emphasized success with marriage too much. Some of them regretted not having emphasized their vocational aspirations more. Madison recommends that educators look closely at the kind of environment the college embodies in order to ascertain if there are ways to encourage women to give primary interest to all aspects of their development.

After a survey of literature on college women's career aspirations, one becomes aware that many studies show that

there is a high level of conflict in college women when they attempt to crystallize their career preferences. Angrist and Almquist (1975) have termed this "juggling with gender" (p. 4). Their observation is that women have difficulties making career choices because women are trying to live up to certain peer expectations. The peer nexus often encourages women to give secondary status to their career plans. The dilemma, according to Angrist and Almquist, is that it is hard to create time for so many different roles, especially if there is a lack of peer support for combining roles.

Several researchers have hypothesized that "home-career" conflict limits the aspirations of college women. Farmer and Bohn (1970) did a study to determine if reducing the level of home-career conflict would change the vocational interest level of women. They asked their subjects to take the Strong Vocational Interest Blank under two conditions. In one condition the subjects responded to the SVIB, as they presently felt about their plans. In the second condition they responded as if there were less conflict in juggling home and career. Interestingly enough, simply imagining that the home-career conflict was not crucial allowed this sample of women to widen their vocational aspirations.

Angrist and Almquist (1975) discovered that 72% of their sample of college women ranked the work feature of "allowing the combination of career and good family life"

as quite or very important in their career decisions. The personal interviews they conducted strongly corroborated the hypothesis that combining career and marriage was a matter that predominated the thoughts of college women. Angrist and Almquist point out that: "Sixty-four percent of seniors feel fully decided about an occupation. This means that fully 36% remain undecided about what occupation to pursue" (p. 51). In contrast 96% of their sample plan to marry. How to combine the two activities of marriage and career is a crucial dilemma that is of primary importance to over half of their sample.

Bayer and associates' (1973) study cited by Angrist and Almquist (1975) is an important addition to the state of knowledge about college students' attitudes. Bayer and associates conducted a longitudinal study of college men and women to discover their changing attitudes over the years. They found a definite change between the years of 1967 and 1971. In the short space of four years social disapproval of women who chose to work after marriage declined. However, in 1971, 25% of their sample still felt that a woman's activities should be confined to home and family. Four years previously, 50% of the sample had endorsed this view.

Rank and Miller (1972) sampled 100 women in high school and college, hypothesizing that:

The cultural imperative of marriage is about to give way to the duality of marriage-career, due to changes in the economy, education, male-female attitudes, and

convenience, both household and otherwise. Therefore, it is important to understand where women fit facts about career and marriage into their lives at a time when this combination seems to be gaining support from over 40% of the women in this culture (Statistical Abstract of the United States, 1970, p. 317).

Rank and Miller cite Matthews and Tiedeman (1964) to show evidence that, in the past, combining career and marriage has presented conflicts for many women. In Rank and Miller's study their findings indicate that there is more acceptance among college women in 1971 of a marriage-career combination than there was in 1964. In their sample the largest percentage of the group indicated a future interest in combining work, marriage, and motherhood. Yet, there was a significant percentage that indicated that they would wait to go back to work until their children were in school. Rank and Miller's findings indicate that vocational plans are linked to marriage and motherhood plans of college women. It is important to note here that the decision to work during marriage is significantly affected by the women's perception of the effects that the working mother may have on her children. In their sample, 68% of the women considered the effects of the working mother to be potentially harmful to the children.

McMillan (1972) sampled college men's attitudes concerning the home-career conflict. The findings indicate that 12% felt that a woman should not work at all after marriage. Thirty-seven percent felt that a woman can work after marriage, as long as no children are in the picture. Thirty-nine

percent felt that a woman could work with children present, but only if the children were in school. Three percent supported the concept of a woman working continuously after marriage, even if the couple has children. If college women are aware of the attitudes of their possible future mates about career and marriage issues, it may significantly affect their vocational goals, according to McMillan (1972).

Barnett (1971) corroborates the hypothesis that college women have conflicts about career-marriage combinations because they receive so many differing messages in their college environments from male and female peers alike. In her extensive study on the personality correlates of vocational planning, Barnett discovered several conflict areas that are germane to this discussion. She divided her group into three sections. The group with the highest career interest felt that career and marriage could be combined. This group expressed a strong desire to make this combination work. The group with medium career interest expressed the opinion that career could be abandoned if the prospective mate disapproved of a career-marriage combination. The group with the least career interest agreed that there are great difficulties in combining a career and marriage, and members would be willing to discontinue a career if their prospective mate disapproved of their career. Thus, Barnett illustrated that one important aspect of career commitment is determined by the salience of a particular

male's attitude. Hawley (1971, 1972) has corroborated this finding in two studies on the perceptions of males in relation to women's career interests.

In addition Barnett (1971) discovered that the most career-committed in her sample perceived themselves as least similar to their female peers in terms of their vocational aspirations. Only 10% of the high career commitment group felt that they had similar goals to that of their friends. In contrast the medium and low career commitment group felt that their career goals were shared by 60% to 80% of their friends. Several other studies attest to the social isolation that career committed college women feel. Horner (1972) discussed the research she did concerning achievement-related conflicts of women. She asked male and female college students to fantasize the ending of a story about a college student who finds himself or herself at the top of the class. The majority of story endings included themes of social rejection and isolation when the story was about a hypothetical woman student. This was not the case when the story was about a male student.

College is a time in which one tries out many different kinds of values (Madison, 1969). Yet, for women, the search for identity through vocation may have certain constraints put upon it. Several factors have been discussed. One important concern for college women is how they will combine marriage and career. Another important concern is whether or not males in their peer group will accept them if they

pursue their career goals. The third concern is the degree to which other women will share their concerns about combining career and marriage. Several studies have shown that highly career-committed college women feel isolated in their present college environment (Helson, 1967). In order to understand the vocational aspirations of female college students one must look closely at these possible areas of conflict. As the college woman begins to explore her future options, she will be greatly affected by the social nexus of which she is a part.

C. Role Model Influences

Cook and Stone (1973), in their APGA monograph on the counseling of women, support the concept that girls and women in the society have been influenced by the lack of female role models in the work world. In their discussion of the role-learning process of women they point out several areas of concern for counselors and quote Rossi's research (1965) on the establishment of the female role concept:

Thus, a girl is seldom told that her mother works because she enjoys it or finds it important to her satisfaction in life, but because the money she earns will help pay for a house, a car, the daughter's clothes, dancing lessons, or school tuition. In other words, working is something women sometimes have to do as mothers, not something mothers do as adult women (p. 29).

Cook and Stone point out that young girls may emulate their mothers as housewives, mothers, and only sometimes as workers outside the home.

The process of identification with a significant other who is occupying a specific vocational role is crucial in the exploration and implementation stage of vocational development. Super, Starishevsky, Maitlin, and Jordaan (1963) have found this to be the case in their research projects about vocational self-concept. In the process of implementing one's self-concept, one attempts to imagine one's self in various occupational roles. Without others to emulate in a field vocational fantasies may be limited. Women, according to research by Harmon (1971), only fantasize themselves in a limited number of occupations. The occupations that they imagine are the ones traditionally dominated by women workers and do not include a wide range of vocational possibilities such as physician, pilot, plumber, or dentist.

Do women limit their vocational fantasies because the role models in many fields are male? Several researchers have hypothesized that women used available female role models because they are afraid that emulating male role models means that they are not "feminine" (Rossi, 1973; Horner, 1972). Defining one's self vocationally in terms of sex role identification is disturbing for many women (Matthews, 1972). For college women the implication is that it is only appropriate for a woman to fulfill certain roles in her life. If she chooses to try vocational roles that have been dominated by male role models, she may question her own sense of gender. The questioning and self-doubt may lead to a limiting of her vocational goals.

Epstein (1970) quotes a prominent woman on her personal views about her role models:

The only other kind of women I knew, growing up were: the old-maid school teacher, the librarian, the one woman doctor in our town who cut her hair like a man, and a few of my college professors. . . . I never knew a woman when I was growing up, who used her mind, played her own part in the world, and also loved, and had children (p. 50).

This quote illustrates again that gender identity and vocational identity are closely related. Ginzberg and associates (1966) determined that many college women did not have female role models with whom to identify in their immediate environment. One woman who did find a role model commented that it inspired her to see a woman combining "teaching, research, and motherhood." It is evident that the college woman in the process of crystallizing and implementing her vocational self concept, may be looking for female role models who have successfully combined career and marriage.

Tangri (1972), in her study of college women's career aspirations discovered that college faculty members play a large role in the developing vocational self concept of women students. Tangri quotes Davis in this regard: "College faculty members appear to be almost as important in helping students make a career choice as are the student's parents" (Davis, 1964). Angrist and Almquist (1975) found that college faculty members had a tremendous influence as role models for college women. In Chapter eight of their book on women's career development, Angrist and Almquist report several findings in this area. One of these insights is:

A subtle influence process operates between career oriented women and their professors. When we asked the women how the faculty view them as students, 81% of career aspirers said that their teachers consider them outstanding or bright. This is significantly higher than the 60% of non-career women who thought their teachers consider them bright. Thus, the career women incorporated a self-image as able, competent and bright--reflecting the positive opinions of their chief evaluators during college (p. 164).

Kundsinn (1974) corroborates this information that college faculty members' attitudes have a profound effect on the emerging vocational self-concept of the college woman. In her study of successful women Kundsinn asked them who had had the greatest influences on their vocational aspirations. In all accounts support from teachers and professors is cited as a crucial variable. Several women comment that without this encouragement, they might have given up their career aspirations.

Parsons, Ruble, Small, and Hodges (1976) posit that women develop perceptions of their own abilities by growing up with certain socializing factors. In the classroom the teacher who expects that the girl will be less capable in math or sciences often covertly discourages the girl's interest in sharpening her math or science skills. This also applies to developing career interests. The teacher or counselor who expects the girl to have limited vocational aspirations may actually discourage the girl from imagining herself as a physician or a mechanic as she gets older. This finding was documented by Schlossberg and Goodman (1972). A cycle develops in which the child, and later the woman, begins

to feel that certain vocations are not appropriate for her to consider pursuing. Parsons, Ruble, Small, and Hodges comment: "Finally, socializing agents should provide models of female competence and should reinforce directly the achievement behaviors and high expectancy attributions of young girls" (p. 57).

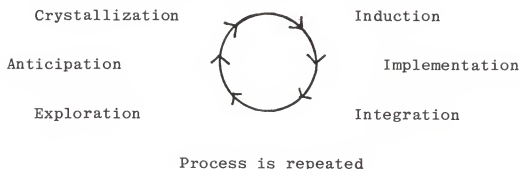
This researcher's current investigation is a study of the effects of parental beliefs, peer beliefs, and role model beliefs on the career aspirations and career attitudes of college women. The last section of the literature review will cover the existing theories that have been formulated concerning women's career aspirations. Within this framework current studies on women's career patterns will be evaluated in terms of their pertinence to this study.

D. Patterns of Women's Career Aspirations

Schlossberg (1976), in her article on career decision making cites many of the factors inhibiting women's career aspirations including several dimensions which have been covered in the previous pages of this literature review. The author discusses early sex-role socialization and lack of role models. She discusses the importance of decision making in women's and men's career development. She states that utilizing the Tiedeman-O'Hara (1963) model is important if one is to understand career decisions. She illustrates with this diagram:

Decision Making Process

Imagination Meets Reality



This model provides an interesting way of conceptualizing the steps in the career development of college women. In the senior and graduate years of college women are mainly concerned with the anticipation stage of the model. Only when they become involved in their first work settings do they experience the reality of their vocational aspiration.

Several vocational theorists have attempted to hypothesize the nature of women's career patterns. Super (1957) theorized that women would choose among seven career patterns. He divided these options up in this way: (1) stable home-making career pattern, (2) conventional pattern, (3) stable working career pattern, (4) double track career pattern, (5) interrupted career pattern, (6) unstable career pattern, (7) multiple trial career pattern. The crucial variable in these formulations is whether the woman plans to marry and what her work involvement will be as a result. Vetter (1973) explained each category of Super's theory in these terms.

Category (1) includes "no significant work experience." Category (2) includes "work after education but not after marriage." Category (3) is for the single woman "who works continuously." Category (4) is for "married women who work continuously." Category (5) is for "married women who work, then are full-time homemakers, then return to work." Category (6) includes women who are "in and out of the labor force at irregular intervals." Category (7) includes women who are involved in "a succession of unrelated jobs."

Vetter (1973) used these categories on a cross-sectional sample of 4,807 women. She found that women were involved in these categories in these percentages: Category (1)--22%, Category (2)--27%, Category (3)--3%, Category (4)--14%, Category (5)--16%, Category (6)--18%. Vetter excluded Category (7) because this category overlapped with other categories.

Watley and Kaplan (1971) performed a follow-up study on female National Merit scholars to determine the nature of their career and marriage plans. In their study, the researchers gave the scholars five alternative life plans to choose. Eight percent chose marriage only as their plan. Thirty-two percent chose marriage and deferred career. Forty-six percent chose marriage and immediate career. Six percent chose the uncertain category. The interesting aspect of these findings is that the desire to marry was a good predictor of actually getting married after college. The expressed preference, in this case, was a good predictor of

later behavior. Some of their other findings were that many women experienced problems in pursuing their life goals. Obstacles included decreased career ambitions over time and frustration at being pulled in too many directions. These factors had a definite effect on the pursuit of their vocational goals.

Astin and Myint (1971) researched the factors that were predictors of women's career commitments after high school. They found that marital plans was one of the best predictors of later career involvement. In their sample, they determined that: "Being married and having children were also negative predictors for careers in science and teaching as opposed to being a housewife or doing office work" (p. 378). They also point out that interest in natural sciences, teaching, or the professions was a fairly good predictor of involvement in these fields after college. In terms of percentages the involvement of women in the work force after college is low in comparison to their male peers.

Bernard (1971) further investigated the sexual breakdown of the labor force and determined that women limited their labor force participation to certain narrow categories. She studied 80 years of labor force participation by women and concluded that:

A logical conclusion from the above trends is that although college trained women are more likely than other women to become gainfully employed and although more women are college trained now than in the past, they are taking positions lower than in the past, and lower than their potential as measured in terms of education would indicate. The problem

is not, therefore, that talented women are not in the labor force but rather that they are not contributing at the level their talents would justify (p. 173).

Bernard suggests, in other books she has written on women, that in previous generations motherhood was the primary concern of most women. However, she points out that in this age of overpopulation, there is less of a mandate for motherhood as a lifelong occupation. Yet, she also comments that even though career and marriage may become the new ethic, many women can not see themselves entering certain occupations because of sex-role socialization.

Rossi (1965), in her article entitled "Who Wants Women Scientists?", discusses many of the factors that limit an individual woman's career aspirations. Her most important finding is that a woman may feel capable of fulfilling a role as a scientist, yet the woman may not be able to imagine herself in that role because she is female. Schlossberg (1976), cited previously, emphasizes that the vocational fantasies one has may be the key to what a person implements in later life. She encourages women to allow themselves to fantasize about many different occupations, including those traditionally assumed to be masculine occupations.

Harmon (1971) determined that college women limited the areas in which they imagined themselves as workers:

Less than 10% ever thought of such highly visible occupations as dentist, pilot, pharmacist, or school principal. Other occupations which boys commonly think of, but less than 10% of these women ever considered, were photographer, reporter, mathematician, surgeon, and income tax accountant (cited in Angrist and Almquist, 1975, p. 120).

From her results, one can surmise that to understand the vocational exploration of college women one must determine what kinds of fields in which they can imagine themselves being participants. If the exploration process is limited in certain sex-stereotyped ways, then the steps of crystallization, choice, clarification, induction, reformation, and integration will also be limited. It is important to determine what the nature of the exploration process is for college women in order to understand the vocational choices they make throughout their lives.

In conclusion, one can look at the influences that surround the life plans of college women. Matthews (1972) suggests that women's career development must be understood in life stages. In order to understand the stages, one needs to look at the social factors affecting a woman's changing image of herself. If one investigates the parental, peer, and role model influences on the developing vocational beliefs of college women, then one can better counsel college women in terms of vocational choices.

CHAPTER III

RESEARCH METHODOLOGY

A. Purpose

The primary purpose of this study was to gain insight into the career development process of college women. Nine main areas were investigated with this purpose in mind. The first area of research emphasis was to determine if there was a relationship between parental, peer, and role model attitudes concerning women's career options and the vocational attitudes and plans of members of Group A and Group B. This area of research inquiry emphasized these topics: plans for varying lengths of time in the labor force, attitudes about the feasibility of combining career and marriage, attitudes about career planning, perceptions of advice from others, and perceptions of obstacles in one's plans. The other main areas of research interest in both groups were the types of vocational role models chosen by each group, the plans for participation in the labor force of each group, and the occupational fantasies of each group.

A questionnaire developed by the researcher was used to collect data from members of Group A and Group B of this study. A pilot mailing of the questionnaire provided

information about the test-retest reliability of the questionnaire. The pilot also gave evidence of the response rate to expect with the final mailing. Stepwise multiple regression was the primary research method utilized in this study (Kerlinger and Pedhauzer, 1973). Forty-five stepwise regression analyses were done using data gathered from Group A and Group B. Both of these groups were partitioned into several subgroups in order to facilitate the understanding of the multiple correlation coefficients. In addition, content analysis was used in order to evaluate the responses to the open-ended questions on the questionnaire. Percentage distributions were noted for both groups in their responses to statements on the questionnaire.

B. The Research Hypotheses for Group A and Group B

Hypothesis One. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the length of time that the respondents plan to spend in the labor force.

Hypothesis Two. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the respondents' attitudes concerning the feasibility of combining career and marriage.

Hypothesis Three. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the respondents' attitudes about the importance of career planning.

Hypothesis Four. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the respondents' attitudes concerning advice given to them by others about the respondents' life planning.

Hypothesis Five. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the respondents' perceptions of obstacles in their life plans.

Hypothesis Six. There will be no difference in the percentage distributions of the number of years chosen to participate in the labor force by Group A and Group B.

Hypothesis Seven. There will be no difference in the percentages of Group A and Group B who perceive combining career and marriage as feasible or not feasible.

Hypothesis Eight. There will be no difference in the percentages of Group A and Group B who perceive career planning as important or not important to them.

Hypothesis Nine. There will be no difference in the percentages of Group A and Group B who perceive advice from others concerning their future as hindering them.

Hypothesis Ten. There will be no difference in the percentages of Group A and Group B who perceive their futures as having or not having obstacles.

Hypothesis Eleven. There will be no difference in the types of vocational role models chosen by Group A and Group B.

Hypothesis Twelve. There will be no difference in the types of life plans discussed by Group A and Group B.

Hypothesis Thirteen. There will be no difference in the conflicts foreseen in the life plans of Group A and Group B.

Hypothesis Fourteen. There will be no difference in the occupational fantasies described for ages eight, thirteen, and twenty by Group A and Group B.

C. Analysis of Hypotheses

For purposes of clarity the research hypotheses will be discussed briefly in order to indicate the method of analysis that was used for each hypothesis.

Hypotheses One, Two, Three, Four, and Five were analyzed using a stepwise multiple regression analysis. Stepwise multiple regression was the principal research method

used in this study. Forty-five regression analyses were done using data gathered from Group A and Group B. A fuller explanation of the multiple regression analysis will follow in section D.

Hypotheses Six, Seven, Eight, Nine, and Ten were analyzed by utilizing the mean values and the percentage distributions of responses to statements concerning intended time in the labor force, attitudes about combining career and marriage, attitudes about career planning, attitudes about advice from others, and attitudes about obstacles in future plans. Comparisons of the similarities and differences between the two groups were made.

Hypotheses Eleven, Twelve, Thirteen, and Fourteen were analyzed using a content analysis method that allowed the researcher to develop a series of frequently chosen categories for both groups. Differences and similarities between the two groups were analyzed. Ginzberg and associates (1966) used this method for analyzing the results of their questionnaire about graduate women's career development.

D. Multiple Regression Analysis Used in This Study

This particular study comes under the heading of ex post facto research as defined by Kerlinger (1973):

Ex post facto research is systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have already occurred or

because they are inherently not manipulatable. Inferences about relation among variables are made, without direct intervention, from concomitant variation of independent and dependent variables (p. 329).

Kerlinger discusses the many strengths and weaknesses of this approach. His conclusion in Multiple Regression in Behavioral Research (1973) is that, despite its limitations, ex post facto research is an important form of inquiry in the behavioral sciences. Much of what the educator or counselor has to study comes in a form that does not lend itself to direct manipulation of independent variables.

Kerlinger and Pedhauzer (1973) give several reasons for using multiple regression analysis in ex post facto research. Multiple regression is useful because it allows one to look at the interactions of many variables simultaneously. They state their conclusion:

Multiple regression is a method of analyzing the collective and separate contributions of two or more independent variables, x_i , to the variation of dependent variable, y . The fundamental task of science is to explain phenomena. As Braithwaite (1953) says, its basic aim is to discover or invent general explanations of natural events. The purpose of science then, is theory. A theory is an interrelated set of constructs or variables that presents a systematic view of phenomena by specifying relations among variables with the purpose . . . of explaining the phenomena (Kerlinger, 1964, p. 11). But this view of science is close to the definition of multiple regression (p. 3).

In this study multiple regression analysis allowed the researcher to look at the contributions of perceived parental, peer, and role model attitudes to five different dependent variables. Several other researchers have advocated

multiple regression analysis as a method for relating several independent variables to one dependent variable (Cohen, 1968; Darlington, 1968; Exekiel and Fox, 1961; Walberg, 1971; Mood, 1971).

E. Selection of Subjects

After consulting Parten (1966) and Kerlinger (1973) the researcher decided to take several steps in selecting the sample. The first step was to obtain a list from the registrar of all female students currently enrolled at the University of Florida in their senior year of the academic year 1977. From this group two sub-samples were chosen for study. For the pilot study a sub-sample of 100 women was chosen randomly from the list. Every twenty-fifth name was chosen in order to select 100 names from the 2500 names available. The data from this pilot sample were not used in the final study. It was selected so that test-retest reliability data could be determined utilizing the responses of the pilot sample of 100 who were sent the questionnaire twice in a two-week period. A different sub-sample of seniors was randomly selected for the final mailing. After elimination of the names of the pilot group a random sample of 250 seniors was chosen from the remaining group of 2400. This group of 250 represented a wide variety of major fields and provided a wide range of responses to the questionnaire.

In the graduate group a random sample of 100 was chosen from a list provided by the registrar of all female students enrolled in M.A., Ed.S., Ph.D., J.D., and M.D. programs. The random sample of 100 was used to determine a test-retest reliability coefficient for this group. The other data available from this group was not used in the final study. After eliminating the names of the pilot group from the list another random sample of 250 names was chosen for the final mailing. The demographic characteristics of Group A and Group B are described in Table 2. This table illustrates the major fields represented in the final sample who returned the questionnaires. In Group A the final return rate was 60%. In Group B the final return rate was 70%.

F. Organization of Subgroups

After the data were collected Group A and Group B were subdivided into nine different categories before the regression analyses were done. Partitioning of the two groups was done because vocational research literature concerning women indicates that an individual's education plans and the occupational status of the individual's mother has an effect on the vocational attitudes of the individual (Matthews, 1972; Barnett, 1971; Baruch, 1973). These following partitions were made:

Group A--Undergraduates

Subgroup 1 -- Students with no further educational plans

Table 2

Undergraduate and Graduate Sample:
Major Fields Represented

Major Field	Percentage of Total
<i>Group A--Undergraduates</i>	
1. Liberal Arts	20.0
2. Business	18.0
3. Education	15.0
4. Nursing	11.0
5. Basic Sciences	9.0
6. Journalism	7.0
7. Fine Arts	5.0
8. Physical Education	4.0
9. Agriculture	4.0
10. Health Related Professions	4.0
11. Engineering	3.0
<i>Group B--Graduates</i>	
1. Education	30.0
2. Law	18.0
3. Liberal Arts	15.0
4. Basic Sciences	13.0
5. Business	5.0
6. Nursing	4.0
7. Agriculture	4.0
8. Fine Arts	4.0
9. Medicine	4.0
10. Journalism	1.0
11. Health Related Professions	1.0
12. Engineering	1.0

Subgroup 2 -- Students with further educational plans

Subgroup 3 -- Students with non-working mothers

Subgroup 4 -- Students with working mothers

Group B--Graduates

Subgroup 5 -- Masters level students with no further educational plans

Subgroup 6 -- Masters level students with further educational plans

Subgroup 7 -- Ph.D. students, J.D. (juris doctor) students, M.D. students

Subgroup 8 -- All graduate students with non-working mothers

Subgroup 9 -- All graduate students with working mothers.

The independent variables in the regression analyses

are:

X1 -- perceived parental attitudes concerning women's career options

X2 -- perceived peer attitudes concerning women's career options

X3 -- perceived role model attitudes concerning women's career options.

The overall measure of the linearity of the relationship between the three independent variables and each dependent variable is:

R -- multiple correlation coefficient.

The dependent variables were defined in this way:

D1 -- planned years in the labor force

- D2 -- attitude about feasibility of combining career and marriage
- D3 -- attitude about the importance of career planning
- D4 -- attitude about advice given by others
- D5 -- attitude about obstacles in future plans.

For subgroups 1 through 9 five regression analyses were done for each subgroup to determine the relationship between X1, X2, X3, and the dependent variables: D1, D2, D3, D4, and D5. Altogether, forty-five regression analyses were done. The overall multiple correlation coefficient, R , was computed for all analyses. In each case if the R were significant at any step of the regression analysis at the .05 or .01 level of significance, it was discussed. The discussion in Chapter V focuses on the independent variable that accounted for the largest portion of the variance in the regression analyses that yielded significant multiple correlation coefficients.

G. Development of the Questionnaire

Section one of the questionnaire--

A review of the vocational studies concerning women's career development that utilized questionnaires indicated that several factors were important in the development of the questionnaire for this study. It was evident that the questionnaire should have statements in it that identified an awareness of the home-career conflict that women may

face (Farmer and Bohn, 1970). The questionnaire for this dissertation study can be found in the Appendix. For each reference group the respondent was asked to mark how she perceived the attitude of parents, peers, or role models about the combination of career and marriage for women. Statements 1, 3, 4, 5, and 11 on pages 1 and 2 of the questionnaire were aimed at this issue. Another important area of concern was the attitudes of parents, peers, and role models in reference to the importance of career planning for women. Previous studies have indicated that these three groups had differing viewpoints on this subject (Madison, 1969; Cook and Stone, 1973; Angrist and Almquist, 1975). In order to determine how the respondents viewed the attitudes of the three reference groups on this issue the respondents were asked to respond to statements 2, 6, 8, and 9 on the questionnaire.

In order to determine how the respondent herself felt about the issues of feasibility of combining career and marriage, the importance of career planning, the advice given to her by others, and the obstacles she perceived in her future plans, the respondent was asked to respond to statements 10, 12, 13, 14, 15, and 16. Statements 1 through 16 were developed so that the respondent could indicate one of five levels of attitude on each statement. The Likert scaling system was used so that a wider variation of response would be obtained than with a Yes/No format (Kerlinger,

1973). Each statement was assigned a value of 1.0, 2.5, 5.0, 7.5, or 10.0 indicating varying levels of agreement or disagreement with the statement. If the statement reflected a perception of strong approval for career and marriage combination, or approval of career planning, then the response was given a rating of ten. If the person perceived that parental, peer, or role model attitudes as disapproval of combining career and marriage or disapproval of the importance of career planning, then a lower score was assigned to the response. Robinson and Shaver (1969) was the primary reference in the development of the statements for the questionnaire.

The highest total composite positive score for parental attitudes was ten points and the parental score was derived from statements 3, 6, and 10. The lowest score possible was one point which indicated a perception of disapproval by the parents. The highest positive score for peers was ten, indicating a high support for career and marriage combination and career planning for women. The lowest possible score was one for peer attitudes. Peer attitudes were measured in statements 1, 4, and 9. Role model attitudes were scored in the same way as parents and peers. Statements 2, 5, and 8 were used as indicators of role model attitudes.

The individuals' attitudes were measured by statements 7, 10, 12, 13, 14, 15, and 16. If they strongly agreed that career and marriage was feasible for them, they were assigned a score of ten. Each level of lesser agreement with this concept was assigned a smaller score. In each of the statements

about the individual's own attitudes a higher score was assigned to statements that revealed positive feelings about combining career and marriage, career planning, advice from others, and lack of obstacles. Conversely, lower scores were assigned perceptions of negative feelings about combining career and marriage, career planning, advice from others and presence of obstacles in their future.

The responses to statements 1 through 16 on section one of the questionnaire were used in the stepwise regression analyses. The parental, peer, and role model scores were entered as the independent variables in the regression equation. The individual woman's responses to statements 7, 13, 15, and 16 were used individually as the dependent variables for each regression analysis. In addition, question 1 of section two of the questionnaire was used as a dependent variable in the regression analyses.

Section two of the questionnaire--

In order to give each respondent a chance to express her views more fully about her career plans, section two of the questionnaire was developed. In this section the respondent was asked about six important areas of her life. Questions 1 and 3 were developed with a partial utilization of Super's (1957) conceptualization of the varying stages of women's career development. The respondent was asked to indicate in question 1 how many years she planned to work outside the home in her lifetime. In question 3 the

respondent was asked to indicate what portions of her life she was planning to work, using a time line beginning at age twenty. The information gathered from these two questions enabled the researcher to gain a fuller picture of the pattern of work involvement planned by both groups. Both groups indicated on the time lines if they planned to take time off from the labor force in order to pursue other activities such as child rearing.

Question 2 was developed using research findings from several studies (Super, 1957; Rossi, 1973; Angrist and Almquist, 1975; Kundsinn, 1974). All of these researchers found that role models were crucial in the developing vocational self-concept of college students. Therefore, it was determined that a question exploring the role modelling process of college women was important to this study. Questions 4 and 5 were developed using the results of several studies previously done concerning college women's career aspirations (Matthews, 1972; Vetter, 1973; Watley and Kaplan, 1971; Ginzberg and associates, 1966; Rand and Miller, 1972). In these two questions the respondents were asked to describe their life plans and the conflicts they perceived in the actualization of those plans. The responses were analyzed by the researcher with an emphasis upon the vocational plans and vocational conflicts of the respondents. Question 6 was developed using information gleaned from studies about occupational fantasies of women (Harmon, 1971; Schlossberg and Goodman, 1972). Both

of these studies indicated that girls and women limit their occupational fantasies in a sex-role stereotyped way.

In order to analyze section two of the questionnaire, trends and themes of common concern were noted utilizing a content analysis method (Kerlinger, 1973). The researcher broke down the responses into frequently described areas of concern for Group A and Group B. In the role model question types of role models were noted with a special emphasis on the occupation and sex of the role model. Life plans and conflicts were analyzed with emphasis upon the vocational aspect of the respondents' lives. Many themes of common concern were noted.

In the undergraduate and graduate groups the pilot mailing of the questionnaire yielded several important types of information. A test-retest reliability coefficient was computed utilizing the responses of the two groups. The method was modelled from one used by Kerlinger (1973). The undergraduate sample yielded a test-retest coefficient of .85. The graduate sample yielded a slightly higher coefficient of .87. These figures are comparable to test-retest reliability coefficients obtained in other studies using questionnaires (Crites, 1969). The response rate for the pilot mailing was 55% for the undergraduates and 60% for the graduates. In order to improve the response rate in the final mailing of the questionnaire a follow-up postcard was sent one week after the questionnaire to remind the respondent about the study. Of the 250 questionnaires

mailed to members of Group A in the final study 60% of the questionnaires were returned. In Group B 70% of the 250 questionnaires were returned. The postcard increased the return rate for both groups by 5 to 10%. A full copy of the letter of informed consent and the vocational questionnaire is reproduced in the Appendix.

H. Limitations of This Study

1. This study's results are only generalizable to female college students enrolled in their senior year of college, or enrolled in Masters, Specialists, Doctoral, Law (J.D.), or Medical (M.D.) programs.
2. This study is limited by self-selection of the respondents to the research instrument. It would be important to repeat this study in the future to determine what biases were true of this particular group of respondents.
3. This study is also limited by the possibility that the responses to the questionnaire may be a biased representation of the perceptions of the two groups. In all studies based on self-report this limitation is present.

CHAPTER IV

RESULTS OF THE STUDY

The purpose of this study was to investigate the important issues that affect the vocational development of college women. A questionnaire developed by the researcher was used in order to discover some of the crucial parameters that affect the vocational decisions that college women make in undergraduate and graduate school. In the first part of this chapter the results of the stepwise regression analyses will be reported for all nine subgroups of Group A and Group B. In the second part of this chapter the results of the content analyses of the open-ended questions for Group A and Group B will be reported. Nine areas of research interest will be reported. These include: years in the labor force, career and marriage, career planning, perception of advice, perception of obstacles, vocational role models, life plans, conflicts in life plans, and occupation fantasies.

Testing of Hypotheses

Hypotheses One and Six:
Years in the Labor Force

Hypothesis One--Group A and Group B. There will be no linear relationship between the perceived attitudes of parents,

peers, and role models concerning women's career options and the length of time the respondents plan to spend in the labor force.

Hypothesis One--Group A -- The null hypothesis was rejected for subgroup one (undergraduates with no further educational plans). There was a linear relationship between the independent variables and the dependent variable of years in the labor force. In this regression analysis the multiple correlation coefficient, R , was significant at the .05 level of confidence in the first step of the regression analysis done with subgroup one. In this analysis the attitudes of role models concerning women's career options were the important factor that accounted for the significant multiple correlation coefficient. Table 3 summarizes this information.

Hypothesis One--Group B -- The null hypothesis was rejected for subgroups six, seven, and nine. There was a linear relationship between the independent variables and the dependent variable of years in the labor force for three of the five subgroups of Group B. In subgroup six (Masters students with further educational plans) the multiple correlation coefficient, R , was significant at the .05 level of confidence at step one of the regression analysis. In this case role model attitudes was the independent variable that accounted for most of the variance in the responses in subgroup six. In subgroup seven (Ph.D., J.D., and M.D. students) the multiple correlation coefficient, R , was significant at the .05 level of confidence for all three steps of the regression analysis. In this case

Table 3
Years in the Labor Force: Multiple
Correlation Coefficients

	Step One	Step Two	Step Three	p	Most Important Independent Variable
<i>Group A --</i>					
subgroup					
one	.36	.37	.37	.05*	role model attitudes
two	.15	.22	.22	NS	-----
three	.19	.25	.25	NS	-----
four	.12	.23	.23	NS	-----
<i>Group B --</i>					
subgroup					
five	.15	.24	.24	NS	-----
six	.37	.37	.37	.05*	role model attitudes
seven	.34	.37	.37	.05*	role model attitudes
eight	.16	.23	.27	NS	-----
nine	.37	.40	.40	.01**	role model attitudes

Note: Most important independent variable indicates which variable accounted for the largest portion of the variance of the dependent variable.

*p < .05

**p < .01

role model attitudes accounted for the largest portion of the variance. In subgroup nine (graduate students with working mothers) the R (.40) was found significant at the .01 level of confidence. Role model attitudes accounted for the largest portion of the variance.

Hypothesis Six--Group A and Group B. There will be no difference in the percentage distributions of number of years chosen to participate in the labor force by Group A and Group B.

Hypothesis six was rejected. Graduate students chose to spend more time in the labor force than undergraduates. Table 4 shows the upward trend in the number of years chosen in going from subgroup one to subgroup nine. One can also see that the percentages of graduate students choosing categories four, five, and six are higher than the undergraduates. Note that subgroup seven (Ph.D., J.D., M.D.) has the highest mean value for this question.

Hypotheses Two and Seven:
Combining career and marriage

Hypothesis Two--Group A and Group B. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the respondents' attitudes concerning the feasibility of combining career and marriage.

Hypothesis Two--Group A -- The null hypothesis was rejected for subgroups one through four. In subgroup one a multiple correlation coefficient of .73 was found

Table 4

Years in the Labor Force: Mean Values
and Percentage Distributions

Number of Years		
<i>Group A --</i>		
subgroup one		26 years
subgroup two		30 years
subgroup three		24 years
subgroup four		32 years
<i>Group B --</i>		
subgroup five		33 years
subgroup six		34 years
subgroup seven		37 years
subgroup eight		35 years
subgroup nine		34 years
Percentage Distributions of Responses		
<i>Category</i>	<i>Group A</i>	<i>Group B</i>
0-10 years	6.9%	4.8%
10-20 years	22.1%	10.1%
20-30 years	29.0%	22.8%
30-40 years	17.3%	30.5%
40-50 years	14.5%	17.4%
50-60 years	11.0%	15.0%

significant at the .01 level of confidence. In this case role model attitudes accounted for most of the variance in subgroup one (undergraduates with no further educational plans). In subgroup two (undergraduates with further educational plans) a multiple correlation coefficient of .52 was found significant at the .01 level of confidence. In this case parental attitudes was the crucial independent variable. For subgroup three (undergraduates with non-working mothers) a multiple correlation coefficient of .55 was found to be significant at the .01 level of confidence. Peer attitudes were crucial in this analysis. In subgroup four a multiple correlation coefficient of .55 was significant at the .01 level of confidence with parental attitudes accounting for the largest portion of the variance. Table 5 provides this information.

Hypothesis Two--Group B -- The null hypothesis was rejected for subgroups seven and nine. For subgroup seven (Ph.D., J.D., M.D.) multiple correlation coefficient of .49 was found significant at the .01 level of confidence. Peer attitudes was the independent variable that accounted for the largest portion of the variance. For subgroup nine (graduate students with working mothers) a multiple correlation coefficient of .35 was found significant at the .01 level of confidence, with peer attitudes as the important independent variable. Table 5 contains the results of the regression analyses done for this hypothesis.

Hypothesis Seven--Group A and Group B. There will be no difference in the percentages of Group A and Group B who

Table 5

Desire to Combine Career and Marriage:
Multiple Correlation Coefficients

	Step One	Step Two	Step Three	p	Most Important Independent Variable
<i>Group A --</i>					
subgroup					
one	.65	.69	.73	.01**	role model attitudes
two	.47	.52	.52	.01**	parents' attitudes
three	.44	.55	.55	.01**	peers' attitudes
four	.41	.55	.55	.01**	parents' attitudes
<i>Group B --</i>					
subgroup					
five	.20	.20	.21	NS	-----
six	.32	.32	.32	NS	-----
seven	.40	.48	.49	.01**	peers' attitudes
eight	.25	.29	.29	NS	-----
nine	.30	.34	.35	.01**	peers' attitudes

* $p < .05$

** $p < .01$

perceive the combination of career and marriage as feasible or not feasible.

Hypothesis seven was rejected because differences were found in the percentages of undergraduates and graduates who perceived career and marriage as feasible or not for them. Table 6 summarizes this information. Subgroup three (undergraduates with non-working mothers) has the highest mean value for this question. This indicates that this subgroup has the highest measured value for support of the feasibility of combining career and marriage. One can also see that there are very few respondents in either group who feel that combining career and marriage is not feasible for them.

Hypotheses Three and Eight:
Importance of career planning

Hypothesis Three--Group A and Group B. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the respondents' attitudes about the importance of career planning.

Hypothesis Three--Group A -- The null hypothesis was rejected for subgroups one through four. Subgroup one (undergraduates with no further educational plans) had a multiple correlation coefficient of .49 which was significant at the .05 level of confidence. Peer attitudes was the important independent variable in this analysis. Subgroup two (undergraduates with further educational plans) had a multiple correlation coefficient of .41 which was significant at the

Table 7

Desire to Combine Career and Marriage:
Mean Values and Percentage
Distributions

Statement: "Combining career and marriage is not feasible for me."

Response coding: 1.0 = strongly agree
 2.5 = agree
 5.0 = neutral
 7.5 = disagree
 10.0 = strongly disagree

Mean Values

<u>Group A</u>	<u>Responses</u>
subgroup one	8.5
subgroup two	8.8
subgroup three	9.3
subgroup four	8.6

<u>Group B</u>	<u>Responses</u>
subgroup five	8.9
subgroup six	8.4
subgroup seven	8.8
subgroup eight	8.9
subgroup nine	8.5

Percentage Distributions

<u>Category</u>	<u>Group A</u>	<u>Group B</u>
Strongly Agree	2.1%	0.0%
Agree	3.4%	2.4%
Neutral	9.0%	8.5%
Disagree	22.1%	21.2%
Strongly Disagree	64.1%	67.3%

.01 level of confidence, with role model attitudes accounting for the largest portion of the variance. A multiple correlation coefficient equal to .40 was found for subgroup three (undergraduates with non-working mothers) to be significant at the .05 level of confidence. Role model attitudes and the importance of career planning had the highest correlation for subgroup three. Subgroup four (undergraduates with working mothers) had a multiple correlation coefficient of .35 which was significant at the .05 level of confidence, with role model attitudes accounting for the largest portion of the variance. Table 7 provides the regression results for this hypothesis.

Hypothesis Three--Group B -- The null hypothesis was rejected for subgroups five, seven, eight, and nine. Subgroup five (Masters students with no further educational plans) had a multiple correlation coefficient of .35 significant at step two of the analysis at the .05 level of confidence, with parental attitudes as the critical independent variable. Subgroup seven (Ph.D., J.D., M.D.) had a multiple correlation coefficient of .37 significant at the .05 level of confidence with role model attitudes as the most important variable. Subgroup eight (graduate students with non-working mothers) had a multiple correlation coefficient of .35 significant at step two of the analysis at the .05 level of confidence. Subgroup nine (graduate students with working mothers) had a multiple correlation coefficient of .31 significant at the .01 level of confidence. For subgroup eight and subgroup

Table 7
Importance of Career Planning:
Multiple Correlation
Coefficients

	Step One	Step Two	Step Three	<u>p</u>	Most Important Independent Variable
<i>Group A --</i>					
subgroup					
one	.47	.48	.49	.05*	Peers' attitudes
two	.39	.40	.41	.01**	role model attitudes
three	.39	.40	.40	.05*	role model attitudes
four	.34	.35	.35	.05*	role model attitudes
<i>Group B --</i>					
subgroup					
five	.27	.35	.35	.05*	parents' attitudes
six	.03	.03	.05	NS	-----
seven	.34	.35	.37	.05*	role model attitudes
eight	.33	.34	.35	.05*	role model attitudes
nine	.26	.30	.31	.01**	role model attitudes

*p < .05

**p < .01

nine role model attitudes was the crucial independent variable in both cases.

Hypothesis Eight--Group A and Group B. There will be no difference in the percentages of Group A and Group B who perceive career planning as important or not important to them.

The null hypothesis was rejected. There was a small percentage difference found in the numbers of undergraduates and graduates who rated career planning as important or not important to them. In this case 3% of the undergraduates rate career planning as unimportant. In contrast, none of the graduate students rates career planning as unimportant to them. Again, subgroup three (undergraduates with non-working mothers) registered the highest mean value. Table 8 provides the information about hypothesis eight for Group A and Group B.

Hypotheses Four and Nine:
Perception of Advice as
a Hindrance

Hypothesis Four--Group A and Group B. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the respondents' attitudes concerning advice given to them by others about the respondents' life planning.

Hypothesis Four--Group A -- The null hypothesis was rejected for subgroups one and four. Subgroup one (undergraduates with no further educational plans) had a multiple

Table 8

Importance of Career Planning:
Mean Values and Percentage
Distributions

Statement: "Career planning is important to me."

Response coding: 1.0 = strongly disagree
 2.5 = disagree
 5.0 = neutral
 7.5 = agree
 10.0 = strongly agree

Mean Values

<u>Group A</u>	<u>Responses</u>
subgroup one	8.5
subgroup two	8.8
subgroup three	9.3
subgroup four	9.0

<u>Group B</u>	<u>Responses</u>
subgroup five	9.0
subgroup six	9.0
subgroup seven	8.6
subgroup eight	9.0
subgroup nine	8.6

Percentage Distributions

<u>Category</u>	<u>Group A</u>	<u>Group B</u>
Strongly Disagree	0.0%	0.0%
Disagree	2.7%	0.0%
Neutral	2.7%	6.4%
Agree	34.2%	37.4%
Strongly Agree	60.3%	56.1%

correlation coefficient of .39 significant at the .05 level of confidence at step two of the regression analysis, with role models' attitudes having the most importance. Subgroup four (undergraduates with working mothers) had a multiple correlation coefficient of .33 significant at the .05 level of confidence, with peer attitudes accounting for the greatest portion of the variance.

Hypothesis Four--Group B -- The null hypothesis was rejected for subgroups six and seven. In subgroup six (Masters students with further educational plans) the multiple correlation coefficient of .34 at step two of the analysis was found to be significant at the .05 level of confidence with peers' attitudes as the independent variable accounting for the largest portion of the variance. In subgroup seven (Ph.D., J.D., M.D.) the multiple correlation coefficient was .42, significant at the .01 level of confidence with parents' attitudes as the crucial factor. Table 9 contains the information pertinent to this analysis.

Hypothesis Nine--Group A and Group B. There will be no difference in the percentages of Group A and Group B who perceive advice concerning their future as hindering them.

The hypothesis was rejected because small differences were found between the percentages of undergraduates and graduates in each category. Table 10 provides this information. It is worth noting that 8% more of the graduates than undergraduates are neutral about advice as a hindrance to them. This is the largest percentage difference between

Table 9
Perception of Advice Giving: Multiple
Correlation Coefficients

	Step One	Step Two	Step Three	p	Most Important Independent Variable
<i>Group A --</i>					
subgroup					
one	.39	.39	.40	.05*	role model attitudes
two	.21	.22	.23	NS	-----
three	.12	.12	.12	NS	-----
four	.31	.33	.33	.05*	peers' attitudes
<i>Group B --</i>					
subgroup					
five	.17	.20	.21	NS	-----
six	.34	.34	.35	.05*	peers' attitudes
seven	.42	.42	.42	.01**	parents' attitudes
eight	.20	.20	.20	NS	-----
nine	.25	.26	.27	NS	-----

* $p < .05$

** $p < .01$

Table 10
Perception of Advice: Mean Values
and Percentage Distributions

Statement: "I believe that advice concerning my future
from others has hindered me.

Response coding: 1.0 = strongly agree
2.5 = agree
5.0 = neutral
7.5 = disagree
10.0 = strongly disagree

Mean Values

<u>Group A</u>	<u>Responses</u>
subgroup one	7.4
subgroup two	7.1
subgroup three	7.6
subgroup four	6.9

<u>Group B</u>	<u>Responses</u>
subgroup five	6.9
subgroup six	7.5
subgroup seven	6.9
subgroup eight	7.4
subgroup nine	6.8

Percentage Distributions

<u>Category</u>	<u>Group A</u>	<u>Group B</u>
Strongly Agree	3.5%	1.8%
Agree	4.8%	6.0%
Neutral	15.9%	24.4%
Disagree	53.8%	48.8%
Strongly Disagree	22.1%	18.9%

the two groups. Also worth noting is that subgroup three (undergraduates with non-working mothers) has the highest mean value indicating that they perceive advice from others as having hindered them the least of any group.

Hypotheses Five and Ten:
Perception of Obstacles in
Life Plans

Hypothesis Five--Group A and Group B. There will be no linear relationship between the perceived attitudes of parents, peers, and role models concerning women's career options and the respondents' perceptions of obstacles in their life plans.

Hypothesis Five--Group A -- The null hypothesis was accepted for all subgroups of Group A. No significant linear relationship could be found in any of the subgroups.

Hypothesis Five--Group B -- The null hypothesis was rejected for subgroups seven and nine. For subgroup seven (Ph.D., J.D., M.D.) a multiple correlation coefficient of .51 was found to be significant at the .01 level of confidence, with peer attitudes appearing as the most important independent variable. For subgroup nine (graduate students with working mothers) a multiple correlation coefficient of .30 was found to be significant at the .05 level of confidence, with peer attitudes accounting for the largest portion of the variance. Table 11 illustrates the findings for hypothesis five for Group A and Group B.

Table 11
Perception of Obstacles: Multiple
Correlation Coefficients

	Step One	Step Two	Step Three	^a p	Most Important Independent Variable
<i>Group A --</i>					
subgroup					
one	.10	.10	.11	NS	-----
two	.10	.12	.13	NS	-----
three	.20	.30	.33	NS	-----
four	.15	.15	.15	NS	-----
<i>Group B --</i>					
subgroup					
five	.19	.24	.25	NS	-----
six	.10	.12	.13	NS	-----
seven	.45	.50	.51	.01**	peers' attitudes
eight	.23	.30	.30	NS	-----
nine	.26	.30	.30	.05*	peers' attitudes

* $p < .05$

** $p < .01$

Hypothesis Ten--Group A and Group B. There will be no difference in the percentages of Group A and Group B who perceive their futures as having or not having obstacles.

The hypothesis was rejected. In this case the graduate students perceived 6% fewer obstacles in their future plans than did the undergraduates. In the neutral category 13% more graduate students than undergraduates felt neutral about the existence of obstacles in their future plans. One should note that subgroup five (Masters students with no further educational plans) has the highest mean value on this question: i.e., they perceive the fewest obstacles in their plans. On the other hand, subgroup one (undergraduates with no further educational plans) perceives the greatest number of obstacles in future plans. Table 12 provides the results from hypothesis ten.

Hypothesis Eleven:
Vocational Role Models
of Group A and Group B

Hypothesis Eleven--Group A and Group B. There will be no difference in the types of vocational role models chosen by Group A and Group B.

The hypothesis was rejected because the types of vocational role models chosen by the two groups were different. The top categories for the two groups consisted of different percentages of responses in several categories. Table 13 provides the information about the various categories chosen by the two groups. The vocational role models chosen most

Table 12

Perception of Obstacles: Mean Values
and Percentage Distributions

Statement: "My future plans have many obstacles."		
Response coding:	1.0 = strongly agree	
	2.5 = agree	
	5.0 = neutral	
	7.5 = disagree	
	10.0 = strongly disagree	

<u>Mean Values</u>		
<u>Group A</u>		<u>Responses</u>
subgroup one		4.5
subgroup two		5.4
subgroup three		5.4
subgroup four		4.9
<u>Group B</u>		<u>Responses</u>
subgroup five		6.0
subgroup six		4.8
subgroup seven		5.6
subgroup eight		5.8
subgroup nine		5.5

<u>Percentage Distributions</u>		
<u>Category</u>	<u>Group A</u>	<u>Group B</u>
Strongly Agree	9.7%	10.1%
Agree	28.7%	21.5%
Neutral	17.3%	30.5%
Disagree	14.5%	17.4%
Strongly Disagree	10.4%	10.1%

Table 13

Role Models: Percentage Distributions for
Group A and Group B

	Group A %	Group B %
1. Mother (positive)	11.3	11.3
2. Mother (negative)	1.5	2.3
3. Peer	11.9	9.0
4. Teacher/Professor	6.7	20.6
5. Working Person (other than teacher or professor)	21.8	20.3
6. Father	7.2	7.0
7. No One	6.7	3.3
8. Qualities	7.2	3.3
9. Relative	9.3	7.0
10. Imaginary Person	1.5	1.3
11. Counselor	3.1	1.3
12. Husband	0.0	1.0
13. Employer	1.0	2.0
14. Homemaker	2.0	1.3
15. Self	0.0	1.3
16. Advisor	0.0	0.3
17. Boyfriend	1.0	0.0
18. Lack of role model	1.0	4.3
19. Blank	6.2	3.3

frequently by Group A were in descending order: working person (other than teacher or professor), peer, and mother. Group B chose teachers and professors more frequently than any other category. Ranked as second and third were working person (other than teacher and professor) and mother. One can note that the largest difference between the two groups is the number of undergraduates versus the number of graduates who chose teachers or professors as role models. One may observe that very few of either group chose themselves as a model. The graduate students chose female role models more often than undergraduate students. Note the differences in the category of teacher or professor and the working person (other than teacher or professor) in terms of the sex of the role model chosen. An important finding is that the undergraduates chose female peers more often than the graduate students. The category of mother as role model was broken down into positive and negative role model. From Table 14 one can observe that small numbers of undergraduates and graduates perceived their mothers as negative role models.

Hypothesis Twelve:
Life Plans of Group A
and Group B

Hypothesis Twelve--Group A and Group B. There will be no difference in the types of life plans discussed by Group A and Group B.

The hypothesis was rejected because life plans differed for the two groups. For Group A 27% of the responses indicated

Table 14

Sex of Role Model: Percentage Distribution of
Responses of Group A and Group B

Category	Sex	Group A	Group B
Teacher/Professor	Female	45.5%	62.7%
Teacher/Professor	Male	27.3%	16.9%
Teacher/Professor	Sex Unspecified	27.3%	20.3%
Working Person (other than teacher/professor)	Female	62.2%	80.4%
Working Person (other than teacher/professor)	Male	22.2%	5.4%
Working Person (other than teacher/professor)	Sex Unspecified	15.5%	12.5%
Peer	Female	70.0%	61.9%
Peer	Male	10.0%	28.8%
Peer	Sex Unspecified	20.0%	9.9%

that establishing themselves in a career was important to them. They ranked marriage and plans for attending graduate school in and third place. Group B ranked establishment in their chosen career field first, also. Yet, there was a greater number of graduates who ranked this category as important in comparison to undergraduates. Table 15 summarizes this information. Note that 15% more of the graduate responses than the undergraduate responses were concerned with establishing themselves in career fields. Next in importance for the graduate students is the desire to combine career, marriage, and child rearing. Fourteen percent of their responses involved a discussion of their plans for combining these activities. The desire to marry appeared as the third most frequent response (11%). It should also be noted that a greater number of responses concerning the willingness to take off time from work for child rearing was noted in the undergraduate group. Another important point is that in the marriage category and the child rearing category approximately one-half of the graduate responses indicated doubt about these activities. This was not true of the undergraduate responses in those categories.

Hypothesis Thirteen:
Conflicts in Life Plans
of Group A and Group B

Hypothesis Thirteen--Group A and Group B. There will be no difference in the conflicts foreseen in the life plans of Group A and Group B.

Table 15

Life Plans: Percentage Distribution of
Responses of Group A and Group B

Catagories	Group A	Group B
1. Establish themselves in career field	26.6%	41.5%
2. Short-term work until marriage	5.1%	0.5%
3. Combine career, marriage and children	12.0%	13.5%
4. Combine career and marriage--children not mentioned	1.7%	1.0%
5. Time off from work planned for child rearing	4.6%	5.4%
6. No plans to raise children	0.8%	1.0%
7. No plans to marry	0.0%	0.0%
8. Attend graduate school	13.7%	7.5%
9. Find mate who approves of career	0.0%	1.5%
10. Find mate	0.8%	0.7%
11. Marry	17.7%	11.4%
12. Find more relationships	0.5%	1.0%
13. Finish degree	8.2%	3.9%
14. Have children	6.0%	9.8%
15. Marry and have children	0.8%	0.0%
16. Plan not to work	0.3%	0.0%

The hypothesis was rejected because Group A and Group B perceived different types of conflicts in their future plans. The first four categories selected by Group A were: 1) sufficient time for dual roles of worker and mother, 2) no major obstacles, 3) academic performance not being adequate, and 4) lack of funds. For Group B the first four categories of conflict were: 1) sufficient time for dual roles, 2) present or future husband's job location, 3) no major obstacles, and 4) finding a spouse who supports career goals of respondent. Although both groups rated having enough time for dual roles as the most likely potential conflict, a greater number of graduate women explicitly deal with this issue. The tabulated results also show that both groups had a substantial number of responses indicating that they perceived no major conflicts in their plans. The largest differences between the two groups appear in the less highly ranked conflicts. The undergraduates are concerned about acceptance into graduate school as well as their financial and intellectual capacity to maintain themselves in graduate school. The graduates are more concerned with how to combine the activities of career, marriage, and children. This concern is evident in their responses which deal with the possibility that their husbands' career goals may come into conflict with their own career plans. This concern is much more prominent for the graduates than for the undergraduates. For both groups the fifth ranked conflict is finding a job in their career field (see Table 16).

Table 16

Life Conflicts: Percentage Distributions of
Responses of Group A and Group B

Catagories	Group A	Group B
1. Loss of time in career	0.6%	3.2%
2. Doing well in career	2.0%	1.8%
3. Finding a spouse who approves of career goals	6.3%	9.3%
4. Sex discrimination on the job	3.5%	7.9%
5. Spouse's job location dif- ferent than respondent's job location	3.5%	13.5%
6. Lack of confidence or assertiveness	6.9%	6.0%
7. Not enough time for dual roles of worker outside the house and mother	16.0%	25.0%
8. Lack of finances	11.8%	5.6%
9. No foreseeable conflicts	15.3%	11.6%
10. Indecision about future plans	6.9%	2.3%
11. Performing adequately in academic pursuits	13.2%	0.9%
12. Finding spouse	2.0%	1.4%
13. Difficulties locating job in career field	10.4%	8.4%
14. Decision about having children or not	1.4%	2.8%

Hypothesis Fourteen:
Occupational Fantasies
of Group A and Group B

Hypothesis Fourteen--Group A and Group B. There will be no difference in the occupational fantasies described for ages eight, thirteen, and twenty by Group A and Group B.

Hypothesis fourteen was rejected because for each category the fantasies of the graduates and undergraduates differed. At age eight the undergraduate group was primarily interested in: teaching, acting/modelling, and nursing. By the age of thirteen their interests had changed to: medicine, acting/modelling, and teaching. Finally, at age twenty the three most frequently cited fantasy groups were: medicine, teaching, and business occupations. In actual major fields chosen by the undergraduates the top three groups chosen in descending order were: liberal arts, business, and education (see Table 17).

For the Masters students at age eight the top three choices were: teaching, nursing, and a miscellaneous category that included choices such as: race car driver, jockey, and cowboy. At age thirteen their top three categories were medicine, teaching, and miscellaneous. At age twenty the top three categories were: education, liberal arts, and the sciences. It is interesting to note that their chosen field of study coincided exactly with the occupations they had fantasized about age twenty.

For the doctoral student group at age eight the top categories chosen were: teaching, actress/modelling, and

Table 17
Occupational Fantasies: Group A and
Group B

Age 8--Fantasy	Age 13--Fantasy	Age 20--Fantasy	Age 20--Major
<i>Group A</i>			
<i>Undergraduates--Top Three Choices</i>			
1. Education	Medicine	Medicine	Liberal Arts
2. Actress/Model	Actress/Model	Education	Business
3. Nursing	Education	Business	Education
<i>Group B</i>			
<i>Masters Students--Top Three Choices</i>			
1. Education	Medicine	Education	Education
2. Nursing	Education	Liberal Arts	Liberal Arts
3. Miscellaneous	Miscellaneous	Sciences	Sciences
<i>Group B</i>			
<i>Ph.D Students--Top Three Choices</i>			
1. Education	Medicine	Liberal Arts	Liberal Arts
2. Actress/Model	Education	Science	Science
3. Nursing	Actress/Model	Education	Education
<i>Group B</i>			
<i>Law Students--Top Three Choices</i>			
1. Education	Liberal Arts	Law	Lawyer
2. Actress/Model	Actress/Model	Liberal Arts	Law Professor
3. Miscellaneous	Education	Education	
<i>Group B</i>			
<i>Medical Students--Top Two Choices</i>			
1. Medicine	Medicine	Medicine	Medicine
2. Basic Science	Basic Science	Basic Science	Basic Science

nursing. At age thirteen: medicine, teaching, and acting/modelling. The top choices at age twenty were: liberal arts, sciences, and education. In actual major chosen the same ranking was given to liberal arts, sciences, and education. In the law student group at age eight the most numerous chosen categories were: teaching, actress/model, and miscellaneous. At age thirteen they chose liberal arts occupations, actress/model, and teaching. They chose lawyer, liberal arts occupations, and teacher as their primary fantasied occupations at age twenty. In actual fact this group plans to practice law with 50% aspiring to find a position as a law professor in a university. One should also note that the undergraduates did not fantasize about becoming professors. Among the graduate students the fantasy of being a professor was evident in approximately 40% of their fantasies in the education category. This finding is important because the role modelling process that operates for these graduate students suggests that professors are people that they emulate and admire. This is evidence for a link between vocational fantasies and choice of role models.

In the medical student group at all three ages the top two fantasies centered on being either a doctor or a scientist. This group showed the most continuity from age to age as well as the highest correlation between fantasy and actual occupations.

CHAPTER V

DISCUSSION AND CONCLUSIONS

The purpose of this study was to examine the career development process of college women. In Chapter IV the results for nine areas of research inquiry were presented. Chapter V includes a discussion of the nine areas of research interest, with an emphasis on the significant results and the implications for counselors. Implications for further research are also presented.

A. Years in the Labor Force

In Chapter IV the results were presented concerning the overall relationship between the independent variables: X1, X2, X3, and the dependent variable: D1. In addition the percentage distribution of responses of undergraduates and graduates was tabulated. In this section the significant multiple correlation coefficients will be discussed. Undergraduates' responses will be discussed first in each section.

The undergraduates chose 0 to 10 years in the labor force, 10 to 20 years, and 20 to 30 years, in greater numbers than did the graduate students. Seven percent of the undergraduates showed an interest in working from 0 to 10 years in their lifetimes. After examining this group of

responses in conjunction with the open-ended question concerning life plans, it was noted that this 7% was interested in working after college, then marrying and discontinuing their work plans. This is similar to one of Super's (1957) categories which included women who work after education, but not after marriage. The greatest percentages of undergraduates in this study chose between 20 to 30 years in the labor force. This interest was characterized by the entrance into the labor force after completing their education, followed by a break of 5 to 20 years for raising children. This finding bears out research done by Vetter (1973) in which she found that 34% of her sample planned to work, marry, and return to the labor force after some interval of time. One must also note that the undergraduates chose categories four through six which range from 30 to 60 years in the labor force, in lesser numbers than did the graduate students. This finding indicates that at least 42% of the undergraduates have a desire to work for fairly long periods of time with fewer intervals for child rearing. This corroborates research done by Watley and Kaplan (1971) that indicates a lessening desire by college women to forego career commitments in favor of long-term child rearing.

The distribution of overall graduate responses was different than the undergraduate responses. The graduate student showed greater interest in working for longer periods of time than the undergraduates. Sixty-three percent of the graduate students expressed a desire to work between 30 and

60 years in their lifetimes. Looking at the responses of the life plans question of the graduate students who chose categories four, five, and six on the questionnaire, it can be seen that the graduate students are concerned about the effects that time away from their careers will have on their career development. This corroborates research done by Angrist and Almquist (1975) and Farmer and Bohn (1970) which deals with the conflicts women may experience in combining the roles of mother and worker outside the home. It is evident that the number of years of schooling and the amount of time planned to spend in the work force are correlated in this study.

The doctoral, law, and medical students plan to spend the longest time in the labor force. The undergraduates with no further educational plans and the undergraduates with non-working mothers plan to spend the least amount of time in the work force. It is evident from the percentage distribution of responses and the mean value of the nine subgroups that having a working mother and having further educational plans are two factors affecting the vocational decisions of female college students.

Five significant relationships were discovered concerning the attitudes of parents, peers, and role models and the student's decision to work. For undergraduates with no further educational plans the reference group accounting for most of the variance was the role model group. Role model attitudes have an influence on the decision about the number of years spent in the labor force.

For the graduate group three subgroups had significant results. The most significant finding was discovered in the graduate group with working mothers. In this case role models' attitudes were of primary importance. It should be noted that role models are an important part of the vocational decision making of graduate students. For Masters students with further educational plans doctoral, law, and medical students role models' attitudes are related to years in the labor force chosen by these subgroups.

The most striking finding in relation to years in the labor force is that for all the subgroups with significant findings role models' attitudes were found to have the most importance. The information derived from this question on the questionnaire can be used in the vocational counseling process. In a college setting groups of undergraduate and graduate women could be formed with a main emphasis on bringing in role models from the working community to discuss their perceptions of working and to discuss the process of vocational decision making that they used when they established themselves in the labor force. It might be especially important to utilize female role models in order to give support to the undergraduate or graduate student who is feeling unsure about entering certain male dominated professions such as business, law, medicine, and science.

B. Career and Marriage

The distribution of responses to the statement "Combining career and marriage is not feasible for me" was almost identical for undergraduates and graduates. A very small percentage, 5% of the undergraduates and 2% of the graduates, responded that combining career and marriage was not feasible for them. Rand and Miller (1972) predicted that the cultural imperative would change in the 1970s in the direction of more acceptance for combining career and marriage. In this sample between 64% and 67% of these college women supported the idea of combining career and marriage.

If one looks for an upward trend in the mean values from Group A to Group B, it is difficult to discern one. All of the mean values are above the neutral category. The fact that all of the mean values are above neutral indicates that these students support combining career and marriage. The subgroup with the highest mean value on this question is the undergraduate group with non-working mothers. One might hypothesize that the reason a career and marriage combination is important to this group is because their mothers did not choose this alternative. This finding would lend support to research done by Schwenn (1970) which indicated that non-working mothers served the function of encouraging the daughters' desire to work.

The career and marriage combination question is one that exhibits the strongest relationship to parents, peers,

and role model attitudes of all the regression analyses performed in this study. Bernard (1975) has discussed the importance of the cultural context in the decision to work, to become a mother, or to combine both activities. For the undergraduates the decision to combine career and marriage is an issue that depends significantly upon the attitudes of all three reference groups. The undergraduate group with no further educational plans exhibits the strongest relationship with reference group attitudes, in particular, with role models accounting for the majority of the variance. The fact that the correlation coefficient is large implies that the role models exert a strong influence.

In the undergraduate group with further educational plans parents account for most of the variance in their responses. One could surmise from previous research (Super, 1957; Roe, 1968) that parental attitudes have an influence upon the vocational aspirations of college students. This research is corroborated by the results of the regression analyses done with undergraduates with further educational plans and undergraduates with working mothers. In both cases parental attitudes were crucial. The decision to combine career and marriage for undergraduates is linked to parental attitudes in two of the four regression analyses performed. For undergraduates with non-working mothers peers' attitudes are related to the undergraduates' attitudes concerning career and marriage.

In contrast, the responses of the graduate students toward this statement are linked to reference group attitudes in only two of the five subgroups. The strongest relationship is found for doctoral, law, and medical students. In their case peer attitudes are related to their viewpoint about the career and marriage combination. The other significant finding is for the graduate students with working mothers. It is important that, again, it is peer attitudes that are the most highly correlated variable with the attitudes of the graduates with working mothers. The graduate students, as a group, have voiced strong support for the feasibility of combining career and marriage.

In both cases, the undergraduate and graduate, their responses can be utilized to develop counseling programs. In the undergraduates' cases the counselor may want to explore the relationship of the clients' attitudes about combining career and marriage in light of the attitudes of all three reference groups: parents, peers, and role models. Parental attitudes seem to have some predominance for the undergraduates. In their vocational development the undergraduates are going through a stage of differentiation (Tiedeman and O'Hara, 1963). They may be looking for support from a significant other in order to determine for themselves how they feel about their future in light of the messages they may be getting from different reference groups about the feasibility of combining career and marriage.

For the graduate students the counselor may want to explore their perceptions of their peer environment to determine whether college is a helpful supportive milieu or a threatening harmful setting in which they feel isolated (Horner, 1972). The counselor might want to explore the idea of forming groups of graduate students to discuss their feelings about their peers' attitudes. This group could serve a function in lessening the sense of social isolation that graduate women have experienced in the past (Cook and Stone, 1973).

C. Career Planning

The distribution of responses to the statement "Career planning is important to me" was very similar to the distribution of responses to the statement concerning career and marriage. In this case none of the graduate students and only 3% of the undergraduates disagreed with the concept of the importance of career planning.

Examining the mean values of subgroups one through nine, it is observed that career planning has the highest mean value for six of the nine subgroups. Furthermore, among the undergraduates, those with further educational plans and those with working mothers rank career planning higher than those with either no further educational plans or those with non-working mothers. If one looks at the mean values of all nine subgroups, one will note that combining career and marriage and career planning are rated in the top two categories

by all nine subgroups. It is important for counselors to be aware that these two issues are of great importance to both groups.

In the undergraduate group it is undergraduates with no further educational plans that have the most significant results of all four subgroups, with peer attitudes accounting for this relationship. In the two previous regression analyses concerning years in the labor force and combining career and marriage, role model attitudes showed the strongest relationship to attitudes of undergraduates with no further educational plans. In this case career planning attitudes are correlated with peer attitudes for these particular undergraduates.

In contrast, for undergraduates with further educational plans and undergraduates with working or non-working mothers, role model attitudes about women's options are an important facet of the rating that these undergraduates give to career planning. This is a significant finding for counselors who are developing career planning programs for undergraduates in the sense that the inclusion of vocational role models as speakers and discussion leaders would facilitate career planning and career decision making.

For the graduate students three of the four significant relationships are accounted for by role models' attitudes. This finding indicates that there is a relationship between role model attitudes about women's career options and the importance that graduate students attribute to their own career planning. Role model attitudes have also been found

to be a determinant of the number of years the graduates plan to spend in the labor force.

The information from these regression analyses can be used to develop an overall picture of the factors affecting both groups. Such findings can be used when developing counselor intervention strategies for undergraduate and graduate students. For example, workshops that focus on student's perceptions of their vocational future, with special emphasis in the discussions of role models that the individual student uses in her vocational decision making, would be helpful for undergraduates and graduates.

D. Perception of Advice

The conceptual framework of this question came from evidence in the literature that women felt hindered by the advice given to them concerning career choices (Farmer, 1976; Schlossberg, 1972). In this sample of undergraduates and graduate students a different pattern emerges for both groups. First of all, the number of significant relationships is less than for the D2 (career and marriage question) and D3 (importance of career planning) set of regression analyses. Nevertheless, for two cases the perception of advice not hindering one is linked to the attitudes of two reference groups. Again, the most significant relationship was found for undergraduates with no further educational plans. This subgroup has more significant results than any of the undergraduate subgroups. This group might be an important target

for counseling intervention, since they will probably be searching for jobs in the immediate future and will be needing interview skills, job selection skills, and general vocational counseling about their future goals. In the perception of advice not hindering them this subgroup's attitudes were linked to the attitudes of role models.

Undergraduates with working mothers is the other subgroup that has significant results. In their case it is peer attitudes that account for most of the variance in their responses. One can recall that undergraduates with working mothers have been influenced by parents in the career and marriage question (D2), by role models in the career planning question (D3), and by peers in the advice question (D4). The correlation between peer attitudes and perception of advice indicates that as peer attitudes become more positive, this subgroup perceives advice as hindering them less. In conclusion, for undergraduates there is evidence that the attitudes of role models and peers is linked to their perception of advice.

In the graduate group the most significant results are found for doctoral, law, and medical students. In the perception of advice about their plans parents' attitudes were crucial for this subgroup. For Masters students with further educational plans it is peers' attitudes rather than parental attitudes that are important.

The counselor may want to explore the nature of the advice about future life plans that is being given to women

students with an emphasis on issues such as career, marriage, vocational self-concept, and perception of conflicts in these areas. The client may be looking to the counselor as a person who offers alternatives to the advice given to them by various reference groups. As Darley (1976) and Oliver (1974) have pointed out, women often feel that different reference groups are offering them rewards for distinctly different life plans. College women may need to decipher the differing messages they are receiving from significant others in order to be able to make sound vocational decisions which reflect their needs rather than reflecting the implicit demands that may be made upon them by other persons.

E. Perception of Obstacles

In statements D2 (career and marriage combination), D3 (career planning), and D4 (perception of advice) the overall distributions of responses of undergraduates and graduates were fairly similar, and the majority of responses were indications of agreement with the importance of a career and marriage combination, career planning, and perceptions of advice as not being a hindrance in most cases. In D5 (perception of obstacles), however, a much larger percentage indicate that there is a negative component in their perceptions of their lives. Over 38% of the undergraduates perceive obstacles in their future plans, whereas a smaller proportion of graduate students (32%) foresee potential conflicts.

The tabulated results reveal that the subgroup having the lowest mean value, i.e., perceiving more obstacles, is the undergraduate group with no further educational plans. This is a significant finding for counselors with undergraduate clients who are undecided about their future educational pursuits. Part of their decision on whether to continue in school may be associated with the perception of obstacles. As a first step towards resolving such potential indecision the counselor may want to discover whether these female students perceive the obstacles as internal or external. It should be noted that no significant multiple correlation coefficients were found for the undergraduates on this question. This may indicate that perception of obstacles is not linked to the attitudes of parents, peers, and role models as presented in the questionnaire. This finding presents a challenge for the counselor working with undergraduate women in the sense that obstacles are perceived by a large proportion of the students and that the nature and source of these feelings may not be linked with parental, peer, or role model attitudes. It has been shown that women often attribute their problems to a lack of positive qualities within themselves (Horner, 1972). If they attribute the obstacles they perceive to inner inadequacy, this may greatly affect the vocational decisions that they make in terms of limiting aspirations, avoiding competitive situations, and limiting their commitment to long-term vocational planning.

In the graduate group two subgroups exhibited a relationship between perception of obstacles and the attitudes of a particular reference group. For doctoral, law, and medical students the attitudes of peers were important. The results for this subgroup indicate a strong relationship between peer attitudes and the perception of obstacles. Such information is useful in developing counseling strategies for doctoral, law, and medical students who may need peer support in order to pursue their vocational goals. For graduates with working mothers peers were also important in the perceptions of obstacles in future plans. The counselor may want to form a vocational group of graduate students that focuses on issues concerning peer group attitudes. Group discussions would include: (1) the types of obstacles that graduate students perceive in their career development, (2) the actions they may want to take to help alleviate the obstacles that they perceive, and (3) the steps they may want to take to help other graduate students who may be experiencing conflict in this regard.

F. Vocational Role Models

Several things must be kept in mind when analyzing the responses to the role model question for Group A and Group B. The research literature on vocational modelling for women has shown that women have felt that there is a lack of female role models who combine career and marriage (Richardson, 1974; Darley, 1976). Women have also expressed a concern about

the lack of female role models in certain fields such as the basic sciences, law, medicine, and business (Rossi, 1965). In this section role models chosen by Group A and Group B will be examined.

The researcher found that individuals often choose someone they know personally as a role model. In many cases this person is a family member. Mothers and fathers were chosen most often in this category. This corroborates the findings of several other vocational theorists (Super, 1957; Baruch, 1973). In addition, teachers and professors were found to play an important role; a fact supported by research done by Ginzberg and Yohalem (1966). Another part of the modelling process was the quality of encouragement and support that these women felt they received from their role models. The mentor relationship is an important facet of the modelling process of these college women.

For the undergraduates the most frequently chosen category was working person (other than teacher or professor). In over 62% of the responses the working person who served as a role model was female. It is interesting to find that the sex of the role model is important to the undergraduate student. Previous research had indicated that the sex of the role model had an effect on the choice of certain role models by women students (Cook and Stone, 1973). In the past some college women were constrained by a feeling of not being able to identify with women who had careers because these women were stigmatized in some way. Evidently the sample

of college women in this study was able to find female role models who were working and served as positive role models.

The second highest category chosen by the undergraduates was the peer category. The qualities of their peers admired by the female undergraduates in this study were independence, self confidence, assertiveness, decisiveness, and helpfulness. In the peer category 62% of the responses stated that the role model chosen was female. Typical in these responses was the theme of emulation of a female peer who risked being assertive and independent.

The third most frequently chosen role model for the undergraduates was their mother. In a small percentage of responses the negative experience of the mother was mentioned. However, the overwhelming majority of undergraduates utilized their mothers' experiences in a positive way. In over half of the responses referring to mothers the mother was admired for combining career and marriage. In approximately 30% of the responses mothers were admired for their child-rearing abilities. In the remaining 20% of these responses mothers were admired and emulated for qualities of support and encouragement without mention of their career or child-rearing activities. In the references to mothers as negative role models the primary response was that these mothers had not been satisfied with their roles as housewives and did not want their daughters to experience the same frustration.

There is a contrast between the undergraduate and graduate choice of role models. The highest rating for graduate

students was teacher or professor (21%). Whereas the undergraduates chose this category in only 7% of the responses. One might hypothesize that utilizing a teacher or professor as a role model might have resulted in the decision to further one's education. Many graduate students cite the influence of a teacher or professor in their decision to pursue their academic endeavors beyond undergraduate school. Previous research has indicated that teachers and professors have a great effect on the vocational and educational decisions of college students (Angrist and Almquist, 1975). For the graduate students in this study teachers and professors were crucial as mentors. One may also note that in 63% of the references to teachers or professors the graduate student chose a female to use as a vocational role model.

The second most frequently chosen role model for the graduate students was a working person (other than teacher or professor). Eighty percent of their responses concerning this type of role model indicated that the sex of the role model chosen was female. This is 18% higher than the undergraduate group. After analyzing the graduate responses one can see that finding a female role model is important to them because a large group of them are highly committed to professions that are male dominated. It is crucial for many of them to find a woman who has been successful in law, science, or medicine.

The third highest category for graduate students was their mothers as role models. The graduate responses about

their mothers were very similar to the responses of the undergraduates; mothers were admired for similar reasons as the mothers of undergraduates. Again, a small percentage of graduates used their mothers as negative role models. However, the majority of graduates discussed the positive qualities of their mothers in terms of caring, support, and encouragement of their career goals.

One is led to the conclusion that both Group A and Group B admire similar groups of people in general. Yet, the ranking they give to various groups and the sex of the role models chosen is somewhat different. This information can be used by counselors who want to develop vocational counseling strategies with the emphasis upon the role modelling process. For the undergraduate student female, working persons (other than teacher or professor) may be used in a group setting as discussion leaders focusing on the vocational decisions these role models have made. For the graduate student it may be helpful to locate female professors and teachers to discuss their perceptions of the academic world with them. It appears that seeing a female who is successful in her career is a tremendous incentive for both undergraduates and graduates. This fact can be used by counselors in creating vocational programs for women students.

G. Life Plans

Two of the most extensive pieces of research concerning the life plans of women students were done by Ginzberg

and associates (1966) and Ginzberg and Yohalem (1966). In these studies college women discussed the amount of time they planned to devote to work, to family, and to leisure time activities. The women described crucial points in their career development, such as finding their first job or pursuing further education. Decisions about working were often interlinked with decisions concerning marriage and children. In this dissertation the respondents were asked to describe their hopes and plans for the future. The researcher analyzed the results in light of several main areas of concern for each group.

In the undergraduate group the most frequently named plan was to establish themselves in their career field. Twenty-seven percent of their responses were in this category. It is significant that this sample of undergraduate women mentions establishment in their career field more often than any other response in the life plans question. This is evidence that women students have a primary interest in their career development.

In the second, third, and fourth categories for undergraduates are: (1) marriage; (2) graduate school; (3) combine career, marriage, and children. It is significant that the undergraduates are interested in combining the roles of worker and wife and mother. This bears out research done by Rand and Miller (1972) and Watley and Kaplan (1971). If one looks at the time lines filled in by the undergraduates on the questionnaire, one derives the impression that much thought

and planning has gone into the type of life they would like to lead. Many of them have set aside definite portions of their lives for working outside the home and for raising children. There is a definite effort to plan the pattern of their vocational lives. The sense of "plannfulness," as Super (1957) has termed it, is an integral part of the lives of these women. The undergraduates manifest the characteristics of crystallization and implementation of their vocational plans in their description of their future lives.

The graduate students have a different composite portrait in the type of life plans they discuss. As in the undergraduate group, the most frequently chosen goal for the graduate students was in the establishment of their respective career fields. In the graduate group, however, a much higher percentage (42%) of the students discussed this phase of their lives. The graduate students, moreover, described the establishment stage of their career development in much greater detail than the undergraduate students. For example, many of them described the steps in finding jobs that would challenge them on a long-term basis, as well as describing the number of years they might spend in various activities such as private law practice, teaching law, working as a states attorney, or running for political office. The responses about their vocational plans showed evidence of the awareness that they would like to build a career in fields such as medicine, law, basic science, business, and education in which they would seek out a variety of job settings that

would provide a challenge and would help in their establishment in fields that demand a long-term commitment.

The second, third, and fourth most frequently chosen goals were: (1) career, marriage, and children; (2) marriage; (3) children. Although the undergraduates and graduates share common concerns, one must note that of the 12% of graduate responses discussing marriage 42% of those responses were expressions of doubt about marriage. Of the responses dealing with child rearing 35% were expressions of doubt about the feasibility of child rearing. In the undergraduate group on the life plans question, doubts were not expressed concerning these two activities. For the graduate group the discussion of life plans that includes marriage and child rearing is an exploration of their feelings that these activities may be difficult to combine with long-term career commitment.

None of the students from either group explicitly stated that they never planned to work. A final sociologically significant finding is that few of these women expressed a concern about loss of femininity if they pursued their career goals. In past decades the stereotype of the masculinized "career" woman has dissuaded some women from their career interests. Perhaps the results of this study indicate that a trend away from that stereotype is occurring. The majority of responses for both groups indicate a desire to work for a significant portion of their lives and to also enjoy the satisfactions of a long-term relationship with a spouse and children.

Counselors can use these findings to enable them to better understand the life planning process of college women. No longer is it possible to assume that female clients will not be interested in discussing their vocational futures. Schlossberg and Pietrofesa (1973) pointed out that male and female counselors had made the assumption that female clients would be less interested in vocational planning than their male counterparts. This study indicates that male and female clients have similar needs in this regard.

H. Conflicts in Life Plans

For undergraduates the four most commonly chosen categories were: (1) insufficient time to fulfill dual roles, (2) no major conflicts, (3) school performance, (4) sufficient finances. The concern about combining dual roles was found in 16% of their responses. In addition to concerns about adequate time for dual roles were anxieties over school performance and sufficient resources to finance graduate educations. Over half of this group hopes to attend graduate school. For many the primary conflict that they face is gaining admission to graduate school. For the other half of the group concerns about finding jobs is primary. This information can be used by college counselors who work with senior women. It is apparent that counseling efforts for the graduating senior woman could focus on these areas: (1) discussion of alternative methods of combining career and marriage, (2) group sessions with women who are presently

combining these activities to determine what factors they consider important to the successful combination of career and marriage, (3) group sessions to discuss job search techniques, (4) group sessions that focus on what to expect in the graduate school experience, and (5) individual counseling sessions with students who feel they need help in coping with the decisions they face concerning their futures.

Several similar concerns were voiced by the graduate students. In 25% of the graduate responses the women expressed some anxiety over the time needed to fulfill the roles of worker and mother. A comment made by this graduate student sums up the tenor of the feelings of the overall responses:

I realize that there can be conflicts in my hopes for having a career, yet being a wife and mother. This is my realization--I think there will be great conflicts when my children are very young (from age of 0-4 years old).

Yet, in many of the responses a realization that spouses could help in child-rearing activities had helped the graduate woman continue her commitment to her career goals. Another aspect of the conflicts felt by graduate students is the feeling that any extended absence from their career field will harm their establishment in that field.

The second, third, and fourth most frequently stated concerns for graduate students were: (1) future or present husband's job location, (2) no major conflicts, and (3) finding a spouse who will support the woman's career goals. One can see from section one of the questionnaire that the graduate students plan to work for a large portion of their

lives. Many of them wonder what will happen to their careers if they are married to spouses who also have long-term career goals. Many respondents stated openly that they did not know what they would do if they were offered jobs in different locations than their spouses.

For the counselor working with graduate women these findings provide insight into the counseling needs of this group. Individual and group counseling sessions can focus on these issues: (1) methods for resolving the potential conflict between the career goals of wife and husband, (2) methods for working out child rearing as a shared activity, (3) methods for establishing oneself in professions that demand long-term commitment such as law or medicine, and (4) conflict resolution techniques for the woman who feels that she does not have time for all the activities she wants to pursue. Working with clients on the basis of the information gathered from this study will enable the counselor to anticipate the conflict areas of graduate women. Having some insight in advance will be important in the formation of whole programs of counselor intervention strategies for use with graduate women.

I. Occupational Fantasies

A study of women's occupational fantasies had found that women tend to fantasize about themselves in occupations that have been traditionally dominated by women (Harmon, 1971). Schlossberg and Goodman (1972) found this also true of girls in elementary school. In the questionnaire the

respondents were asked to remember what occupations they had fantasized about at age eight, thirteen, and twenty.

At age eight the bachelor and doctoral students rated teacher, actress/model, and nurse as their top three choices. The masters students rated teacher, nurse, and miscellaneous as the most popular choices for them. The miscellaneous category included choices such as: jockey, race car driver, and cowboy. It is significant that the miscellaneous category is the only category at age eight that is not a female dominated profession. The law students chose teacher, actress/model, and miscellaneous as their top three choices. In contrast to the basic similarities of all these choices were the choices of the medical students. At age eight they only had two categories in which they were interested: medicine and basic science.

At age thirteen there is a shift of interest for all the groups. At this age the most frequently named fantasy for all groups except the law students was being a doctor. One can see that this choice is not as sex-role stereotyped as the fantasies of these students at age eight. However, one can observe that each group shows some continuity in their fantasy life because teacher, actress/model, nurse, and miscellaneous are still frequently chosen by all groups except the medical students.

At age twenty the groups became more diverse in their fantasies and there is evidence for crystallization of their occupational interests. Several vocational researchers have

hypothesized that there is a link between fantasy and occupational choice (Tiedeman and O'Hara, 1963). It is noteworthy that for all five groups their occupational fantasies are related to their field of study. At age twenty the choices of all five groups in their fantasy life are almost identical to the majors they have pursued. One discrepancy is that medicine is still the first choice in fantasy for undergraduates, whereas in actual major field very few of them are pre-medical. This fact may be indicative of the obstacles that many of the undergraduates feel are present in the pursuit of medical careers. There is evidence that in the past this field was not seriously considered very often by women students (Rossi, 1965). This may still be true for this group of students. The counselor may want to use this information to determine if the undergraduate women they counsel feel frustration about their medical interests.

Further research needs to be done to determine the exact nature of the link between occupational fantasies of college women and the actual fields of study they pursue. It may be true that college women are still imagining themselves in ways that are constrained by sex role stereotypes. The counselor can use these findings when working with college women. One method available is utilizing fantasies as the starting point for exploration of the vocational possibilities that the female client has considered for herself. The counselor may want to ask the client to write down the occupational

fantasies that she considered at age eight, thirteen, and twenty in order to start a discussion of vocational fantasies.

J. Research Implications

In view of the findings of this study the researcher suggests the following implications for future research.

1. Researchers have found that dual role constraints have affected the vocational plans of college women (Cook and Stone, 1973; Angrist and Almquist, 1975). The findings of this study support the idea that dual role conflicts affect college women in the 1970s. More research needs to be done to determine how this conflict can be resolved.
2. The findings of this study suggest that certain reference groups are important for various subgroups of undergraduate and graduate students. This information needs to be further refined to explore all the effects that reference groups may have on vocational decisions of college women.
3. In this study female vocational role models were cited as influential in the lives of college women. Further research needs to be done to determine the exact nature of the influence that these models have on college women. It would be important to find out at what ages the role models seem to have the greatest influence in order to develop counseling strategies for different age groups.

4. The findings of this study indicate that college women feel there are many obstacles in their future plans. Further research can be done to discover what counseling methods would help in reducing the perception of obstacles to vocational plans and at what life stage counseling intervention would be helpful.
5. The findings of this study suggest that there is a developmental trend in the occupational fantasies of college women. Further research can be done to determine the stages of this developmental process and to discover what types of counselor interventions would be useful at different stages in this process.
6. In order to corroborate the findings of this study about the career development processes of undergraduate and graduate women it is recommended that this study be replicated with samples of college women from different areas of the country.

APPENDIX

VOCATIONAL QUESTIONNAIRE

Informed Consent Form
University of Florida
Gainesville, Fla.

Reply to:

Beaty Towers Box A0208 U.F.
Gainesville, Florida 32612

Dear Student,

I am conducting a study as part of my doctoral program. I hope you can take ten to fifteen minutes to complete the attached form. When I have completed the study the results will be available to you if you are interested in receiving them. Your responses will be coded so that they will be completely anonymous. Thank you for your participation.

Sincerely,

Jeanne Combs
(Doctoral Student)

1. Major field you are studying _____
 2. Degree you are finishing _____
 3. Plans for further education _____
 4. Mother's occupation _____
 5. Father's occupation _____
-

Please mark the category that reflects the way you feel about the statement.

Definitions: PEERS = friends or acquaintances;
 ROLE MODELS = persons you admire;
 SA = Strongly Agree; A = Agree; N = Neutral;
 D = Disagree; SD = Strongly Disagree.

- | | SA | A | N | D | SD |
|---|----|---|---|---|----|
| 1. My peers believe that women will have many conflicts if they combine career and marriage. | — | — | — | — | — |
| 2. My role models indicate that career planning is important for women. | — | — | — | — | — |
| 3. Combining marriage and career has been the focus of my parent's hopes for me. | — | — | — | — | — |
| 4. Female peers express the opinion that women wanting a career will have greater difficulty in finding a mate. | — | — | — | — | — |
| 5. My role models believe that combining career and marriage is difficult for a woman. | — | — | — | — | — |
| 6. My mother has encouraged me to plan a career. | — | — | — | — | — |
| 7. A combination of marriage and career is not feasible for me. | — | — | — | — | — |
| 8. My role models have been encouraging towards my planning for a future career. | — | — | — | — | — |

SA A N D SD

- | | | | | | |
|--|---|---|---|---|---|
| 9. As a group, my female peers tend to think career planning is important for their future. | — | — | — | — | — |
| 10. Views concerning career and marriage from my female peers have had little or no influence on me. | — | — | — | — | — |
| 11. My father believes that it is a bad idea for women to combine career and marriage. | — | — | — | — | — |
| 12. My mother's views concerning marriage and career have influenced me greatly. | — | — | — | — | — |
| 13. Career planning is important to me. | — | — | — | — | — |
| 14. My role model's views concerning marriage and career have influenced me greatly. | — | — | — | — | — |
| 15. I believe that advice concerning my future from others has hindered me. | — | — | — | — | — |
| 16. My future plans have many obstacles. | — | — | — | — | — |
-

SECTION TWO

1. Please mark the box that reflects how long you plan to work outside the home in your lifetime:
- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> 0-10 years | <input type="checkbox"/> 30-40 years |
| <input type="checkbox"/> 10-20 years | <input type="checkbox"/> 40-50 years |
| <input type="checkbox"/> 20-30 years | <input type="checkbox"/> 50-60 years |
2. Briefly describe a person or persons who have served as a role model/models for you. (You need not name them.)

3. This is a time line. Please mark the section or sections of the line that represent the time or times in your life that you plan to work outside the home.

Age 20 25 30 35 40 45 50 55 60 65 70 75 80

4. Describe your plans and hopes for your future. (Include anything you think is important for you.)

5. Describe any areas of conflict in the realization of your hopes and plans.

6. Please name two occupations you fantasized about at these ages.

Age Eight

Age Thirteen

Age Twenty

1. _____

2. _____

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BIOGRAPHICAL SKETCH

Jeanne Combs was born and educated in Chicago, Illinois. She attended the University of Wisconsin and University of Illinois, receiving a B.A. in English, and minoring in Afro-American studies and psychology. In her undergraduate years, her main interests were in working as a camp counselor, reading tutor, and recreation leader for handicapped children. She received an Educational Specialists degree in Counselor Education from the University of Florida in 1976. In 1978 she will receive a Ph.D. degree from that institution, majoring in Counselor Education, and minoring in Social Psychology. Her area of specialization in her doctoral program has been the counseling needs of college women. In graduate school her primary interests have included counseling college students, doing research in photographic self concept and women's career development. In the future she plans to counsel, and to teach, and do research in the counseling field.

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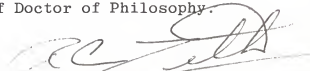
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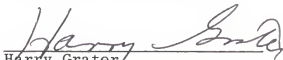
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